



# INTERMEDIATE STATE PERMIT TO OPERATE

Under the authority of RSMo 643 and the Federal Clean Air Act the applicant is authorized to operate the air contaminant source(s) described below, in accordance with the laws, rules, and conditions set forth here in.

**Intermediate Operating Permit Number:**

**Expiration Date:**

**Installation ID:** 101-0003

**Project Number:** 2002-06-013

**Installation Name and Address**

ThyssenKrupp Stahl Company – Kingsville Plant  
111 E. Pacific  
Kingsville, MO 64061  
Johnson County

**Parent Company's Name and Address**

ThyssenKrupp Budd Company  
3155 W. Big Beaver Road  
Troy, MI 48007

**Installation Description:**

ThyssenKrupp Stahl Company is a manufacturer of molded aluminum castings. The facility melts aluminum ingots in furnaces fired by natural gas or liquid petroleum gas (LPG), and then pours the metal into permanent cast iron molds to cast aluminum parts. Process operations include melt furnaces; sand core curing; a waste incinerator; two paint spray booths; sand blasting; electric arc welding; and miscellaneous combustion units.

ThyssenKrupp Stahl Company has a pre-control potential to exceed Part 70 permitting thresholds for SO<sub>2</sub> and NO<sub>x</sub>. The facility has accepted voluntary, federally enforceable SO<sub>2</sub> and NO<sub>x</sub> emission limits of less than 100 ton /yr each to qualify for an Intermediate State Operating Permit

---

Effective Date

---

Director or Designee

Department of Natural Resources

## Table of Contents

<b>I. INSTALLATION DESCRIPTION AND EQUIPMENT LISTING .....</b>	<b>4</b>
INSTALLATION DESCRIPTION .....	4
EMISSION UNITS WITH LIMITATIONS .....	4
EMISSION UNITS WITHOUT LIMITATIONS .....	5
DOCUMENTS INCORPORATED BY REFERENCE .....	5
<b>II. PLANT WIDE EMISSION LIMITATIONS .....</b>	<b>6</b>
PERMIT CONDITION PW001 .....	6
10 CSR 10-6.060 Construction Permits Required	
Construction Permit #1190-008, Issued November 19, 1990	
PERMIT CONDITION PW002 .....	6
10 CSR 10-6.060 Construction Permits Required	
Construction Permit #0894-019, Issued August 4, 1994	
PERMIT CONDITION PW003 .....	6
10 CSR 10-6.060 Construction Permits Required	
Construction Permit #042002-010, Issued March 20, 2002	
PERMIT CONDITION PW004 .....	7
10 CSR 10-6.065(2)(C) and 10 CSR 10-6.065(5)(A) Voluntary Limitation(s)	
<b>III. EMISSION UNIT SPECIFIC EMISSION LIMITATIONS .....</b>	<b>8</b>
EU0010 THROUGH EU0260 – MELT FURNACES .....	8
PERMIT CONDITION (EU0010 THROUGH EU0260)-001 .....	10
10 CSR 10-6.220 Restriction of Emission of Visible Air Contaminants	
PERMIT CONDITION (EU0010 THROUGH EU0260)-002 .....	12
10 CSR 10-6.260 Restriction of Emission of Sulfur Compounds	
PERMIT CONDITION (EU0070 AND EU0080)-003 .....	12
10 CSR 10-6.060 Construction Permits Required	
Construction Permit #0195-012, Issued January 8, 1995	
PERMIT CONDITION (EU0090 AND EU0100)-004 .....	13
10 CSR 10-6.060 Construction Permits Required	
Construction Permit #0695-002, Issued May 23, 1995	
EU0270 – INCINERATOR .....	13
PERMIT CONDITION EU0270-001 .....	13
10 CSR 10-6.060 Construction Permits Required	
Construction Permit #0277-001, Issued February 7, 1977	
PERMIT CONDITION EU0270-002 .....	14
10 CSR 10-6.260 Restriction of Emission of Sulfur Compounds	
EU0280 – CORE BURNOUT OVENS .....	14
PERMIT CONDITION EU0280-001 .....	15
10 CSR 10-3.060 Maximum Allowable Emissions of Particulate Matter From Fuel Burning Equipment Used for Indirect Heating	
PERMIT CONDITION EU0280-002 .....	15
10 CSR 10-6.220 Restriction of Emission of Visible Air Contaminants	
PERMIT CONDITION EU0280-003 .....	16
10 CSR 10-6.260 Restriction of Emission of Sulfur Compounds	
EU0290 AND EU0300 – PAINT SPRAY BOOTHS .....	17
PERMIT CONDITION (EU0290 AND EU0300)-001 .....	17
10 CSR 10-6.400 Restriction of Emission of Particulate Matter From Industrial Processes	
EU0310 – SAND CORE CURING PROCESS .....	18
PERMIT CONDITION EU0310-001 .....	18
10 CSR 10-6.260 Restriction of Emission of Sulfur Compounds	
<b>IV. CORE PERMIT REQUIREMENTS .....</b>	<b>20</b>

<b>V. GENERAL PERMIT REQUIREMENTS.....</b>	<b>25</b>
<b>VI. ATTACHMENTS .....</b>	<b>29</b>
ATTACHMENT A.....	30
ATTACHMENT B.....	32
ATTACHMENT C1.....	33
ATTACHMENT C2.....	34
ATTACHMENT D.....	35
ATTACHMENT E.....	36
ATTACHMENT F.....	37
ATTACHMENT F.....	38
ATTACHMENT G.....	39
ATTACHMENT H.....	40

Draft

## I. Installation Description and Equipment Listing

### INSTALLATION DESCRIPTION

ThyssenKrupp Stahl Company is a manufacturer of molded aluminum castings. The facility melts aluminum ingots in furnaces fired by natural gas or liquid petroleum gas (LPG), and then pours the metal into permanent cast iron molds to cast aluminum parts. Process operations include melt furnaces; sand core curing; a waste incinerator; two paint spray booths; sand blasting; electric arc welding; and miscellaneous combustion units.

ThyssenKrupp Stahl Company has a pre-control potential to exceed Part 70 permitting thresholds for SO<sub>2</sub> and NO<sub>x</sub>. The facility has accepted voluntary, federally enforceable SO<sub>2</sub> and NO<sub>x</sub> emission limits of less than 100 ton /yr each to qualify for an Intermediate State Operating Permit

Reported Air Pollutant Emissions, tons per year							
Year	Particulate Matter ≤ Ten Microns (PM-10)	Sulfur Oxides (SO <sub>x</sub> )	Nitrogen Oxides (NO <sub>x</sub> )	Volatile Organic Compounds (VOC)	Carbon Monoxide (CO)	Lead (Pb)	Hazardous Air Pollutants (HAPs)
2004	3.94	1.34	20.23	1.56	17.54	0.00	0.00
2003	3.40	1.11	15.27	2.63	13.18	0.00	0.00
2002	1.23	0.99	13.71	1.66	11.68	0.00	0.00
2001	2.28	8.21	13.38	1.49	11.39	0.00	0.00
2000	1.73	0.17	14.85	1.79	12.64	0.00	0.00

### EMISSION UNITS WITH LIMITATIONS

The following list provides a description of the equipment at this installation which emits air pollutants and which is identified as having unit-specific emission limitations.

Emission Unit #	Description of Emission Unit	2004 EIQ #
EU0010	Melt Furnace #1	EP-01
EU0020	Melt Furnace #2	EP-02
EU0030	Melt Furnace #3	EP-03
EU0040	Melt Furnace #4	EP-04
EU0050	Melt Furnace #5	EP-05
EU0060	Melt Furnace #6	EP-06
EU0070	Melt Furnace #7	EP-07
EU0080	Melt Furnace #8	EP-08
EU0090	Melt Furnace #9	EP-09
EU0100	Melt Furnace #10	EP-10
EU0110	Melt Furnace #11	EP-11
EU0120	Melt Furnace #12	EP-12
EU0130	Melt Furnace #13	EP-13
EU0140	Melt Furnace #14	EP-14
EU0150	Melt Furnace #21	EP-21
EU0160	Melt Furnace #22	EP-22
EU0170	Melt Furnace #23	EP-23

<u>Emission Unit #</u>	<u>Description of Emission Unit</u>	<u>2004 EIQ #</u>
EU0180	Melt Furnace #24	EP-24
EU0190	Melt Furnace #25	EP-25
EU0200	Melt Furnace #26	EP-26
EU0210	Melt Furnace #27	EP-27
EU0220	Melt Furnace #28	EP-28
EU0230	Melt Furnace #29	EP-29
EU0240	Melt Furnace #30	EP-30
EU0250	Melt Furnace #31	EP-31
EU0260	Melt Furnace #32	EP-32
EU0270	Incinerator	EP-42
EU0280	Core Burnout Ovens	EP-43
EU0290	Paint Spray Booth	EP-44
EU0300	Small Paint Booth (Wood Pattern Shop)	EP-49
EU0310	Sand Core Curing Process	EP-54

#### **EMISSION UNITS WITHOUT LIMITATIONS**

The following list provides a description of the equipment which does not have unit specific limitations at the time of permit issuance.

<u>Description of Emission Source</u>	<u>2004 EIQ #</u>
Space heaters, natural gas & liquid petroleum gas-fired, 4.03 MMBtu/hr total	EP-43
Electric arc welding, fugitive	EP-45
Parts washers	EP-46
Sand blasting unit, fugitive	EP-47
Portable diesel generator	EP-48
Wood pattern shop, fugitive	EP-50
Sand core shake-out units (total enclosure)	EP-53

#### **DOCUMENTS INCORPORATED BY REFERENCE**

These documents have been incorporated by reference into this permit.

- 1) Construction Permit #0277-001, issued February 7, 1977
- 2) Construction Permit #1190-008, issued, January 19, 1987
- 3) Construction Permit #0493-013, issued April 20, 1993
- 4) Construction Permit #0894-019, issued August 4, 1994
- 5) Construction Permit #0195-012, issued January 8, 1995
- 6) Construction Permit #0695-002, issued May 22, 1995
- 7) Construction Permit #0296-011A, issued May 31, 1996
- 8) Construction Permit #042002-010, issued March 20, 2002

## II. Plant Wide Emission Limitations

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued.

### **PERMIT CONDITION PW001**

10 CSR 10-6.060 Construction Permits Required  
Construction Permit #1190-008, Issued November 19, 1990

#### **Operational Limitation:**

A copy of Construction Permit #1190-008 and review shall be kept at this plant site and be made available to Department of Natural Resources' personnel immediately upon request.

#### **Monitoring/Recordkeeping/Reporting:**

No additional monitoring, recordkeeping, or reporting is required for this permit condition.

### **PERMIT CONDITION PW002**

10 CSR 10-6.060 Construction Permits Required  
Construction Permit #0894-019, Issued August 4, 1994

#### **Operational Limitation:**

A copy of Construction Permit #0894-019 shall be kept on-site and made immediately available to Missouri Department of Natural Resources' personnel upon verbal request.

#### **Monitoring/Recordkeeping/Reporting:**

No additional monitoring, recordkeeping, or reporting is required for this permit condition.

### **PERMIT CONDITION PW003**

10 CSR 10-6.060 Construction Permits Required  
Construction Permit #042002-010, Issued March 20, 2002

#### **Operational Limitation:**

The permittee shall only melt or process clean metal (aluminum) that contains no visible oil or other organic contaminant.

#### **Monitoring/Record Keeping:**

No additional monitoring or recordkeeping is required for this permit condition.

#### **Reporting:**

Reports of any deviations from this permit condition shall be submitted annually, in the annual monitoring report and annual compliance certification, as required by Section V of this permit.

**PERMIT CONDITION PW004**

10 CSR 10-6.065(2)(C) and 10 CSR 10-6.065(5)(A) Voluntary Limitation(s)

**Emission Limitations:**

- 1) The permittee shall emit into the atmosphere less than 100 tons of sulfur dioxide (SO<sub>2</sub>) from the entire facility in any consecutive 12-month period.
- 2) The permittee shall emit into the atmosphere less than 100 tons of nitrogen oxides (NO<sub>x</sub>) from the entire facility in any consecutive 12-month period.

**Monitoring/Recordkeeping:**

- 1) The permittee shall record the monthly and the sum of the most recent consecutive 12-months of SO<sub>2</sub> emissions (in tons) from this facility. (See Attachment A.)
- 2) The permittee shall record the monthly and the sum of the most recent consecutive 12-months of NO<sub>x</sub> emissions (in tons) from this facility. (See Attachment B.)
- 3) The permittee shall maintain these records for the most recent five years. They must be maintained on-site for two years. They may be kept in either written or electronic form.
- 4) The permittee shall immediately make these records available for inspection to any Department of Natural Resources personnel upon request.

**Reporting:**

- 1) The permittee shall report to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the end of the month during which the records indicate that the source exceeded either of these emission limitations.
- 2) Reports of any deviations from monitoring, recordkeeping and reporting requirements of this permit condition shall be submitted annually, in the annual monitoring report and annual compliance certification, as required by Section V of this permit.

### III. Emission Unit Specific Emission Limitations

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued.

EU0010 THROUGH EU0260 – MELT FURNACES			
Emission Unit	Description	Manufacturer/ Model #	2004 EIQ #
EU0010	Melt Furnace #1 (Dept. 01-S); MHDR aluminum - 0.75 ton/hr; 6.4 MMBtu/hr; fired with natural gas and/or LPG; fuel capacity: natural gas - 0.0061 10 <sup>6</sup> scf/hr; LPG - 0.071 10 <sup>3</sup> gal/hr; installed 1993	Stahl/4500 DDR	EP-01
EU0020	Melt Furnace #2 (Dept. 01-S); MHDR aluminum - 0.75 ton/hr; 6.4 MMBtu/hr; fired with natural gas and/or LPG; fuel capacity: natural gas - 0.0061 10 <sup>6</sup> scf/hr; LPG - 0.071 10 <sup>3</sup> gal/hr; installed 1993	Stahl/4500 DDR	EP-02
EU0030	Melt Furnace #3 (Dept. 01-S); MHDR aluminum - 0.75 ton/hr; 6.4 MMBtu/hr; fired with natural gas and/or LPG; fuel capacity: natural gas - 0.0061 10 <sup>6</sup> scf/hr; LPG - 0.071 10 <sup>3</sup> gal/hr; installed 1993	Stahl/4500 DDR	EP-03
EU0040	Melt Furnace #4 (Dept. 01-S); MHDR aluminum - 0.75 ton/hr; 6.4 MMBtu/hr; fired with natural gas and/or LPG; fuel capacity: natural gas - 0.0061 10 <sup>6</sup> scf/hr; LPG - 0.071 10 <sup>3</sup> gal/hr; installed 1990	Stahl/4500 DDR	EP-04
EU0050	Melt Furnace #5 (Dept. 01-S); MHDR aluminum - 0.75 ton/hr; 6.4 MMBtu/hr; fired with natural gas and/or LPG; fuel capacity: natural gas - 0.0061 10 <sup>6</sup> scf/hr; LPG - 0.071 10 <sup>3</sup> gal/hr; installed 1990	Stahl/4500 DDR	EP-05
EU0060	Melt Furnace #6 (Dept. 01-S); MHDR aluminum - 0.75 ton/hr; 6.4 MMBtu/hr; fired with natural gas and/or LPG; fuel capacity: natural gas - 0.0061 10 <sup>6</sup> scf/hr ; LPG - 0.071 10 <sup>3</sup> gal/hr; installed 1989	Stahl/4500 DDR	EP-06
EU0070	Melt Furnace #7 (Dept. 01-N); MHDR aluminum - 1.0 ton/hr; 6.8 MMBtu/hr; fired with natural gas and/or LPG; fuel capacity: natural gas - 0.0065 10 <sup>6</sup> scf/hr; LPG - 0.075 10 <sup>3</sup> gal/hr; installed 1995	Stahl/6000 DDR	EP-07
EU0080	Melt Furnace #8 (Dept. 01-N); MHDR aluminum - 1.0 ton/hr; 6.8 MMBtu/hr; fired with natural gas and/or LPG; fuel capacity: natural gas - 0.0065 10 <sup>6</sup> scf/hr; LPG - 0.075 10 <sup>3</sup> gal/hr; installed 1995	Stahl/6000 DDR	EP-08



<b>EU0010 THROUGH EU0260 – MELT FURNACES</b>			
<b>Emission Unit</b>	<b>Description</b>	<b>Manufacturer/ Model #</b>	<b>2004 EIQ #</b>
EU0090	Melt Furnace #9 (Dept. 01-N); MHDR aluminum - 1.0 ton/hr, 6.8 MMBtu/hr; fired with natural gas and/or LPG; fuel capacity: natural gas - 0.0065 10 <sup>6</sup> scf/hr; LPG - 0.075 10 <sup>3</sup> gal/hr; installed 1995	Stahl/6000 DDR	EP-09
EU0100	Melt Furnace #10 (Dept. 01-N); MHDR aluminum - 1.0 ton/hr, 6.8 MMBtu/hr; fired with natural gas and/or LPG; fuel capacity: natural gas - 0.0065 10 <sup>6</sup> scf/hr; LPG - 0.075 10 <sup>3</sup> gal/hr; installed 1995	Stahl/6000 DDR	EP-10
EU0110	Melt Furnace #11 (Dept. 01-N); MHDR aluminum - 1.0 ton/hr, 6.8 MMBtu/hr; fired with natural gas and/or LPG; fuel capacity: natural gas - 0.0065 10 <sup>6</sup> scf/hr; LPG - 0.075 10 <sup>3</sup> gal/hr; installed 1996	Stahl/6000 DDR	EP-11
EU0120	Melt Furnace #12 (Dept. 01-N); MHDR aluminum - 1.0 ton/hr, 6.8 MMBtu/hr; fired with natural gas and/or LPG; fuel capacity: natural gas - 0.0065 10 <sup>6</sup> scf/hr; LPG - 0.075 10 <sup>3</sup> gal/hr; installed 1996	Stahl/6000 DDR	EP-12
EU0130	Melt Furnace #13 (Dept. 01-N); MHDR aluminum - 1.0 ton/hr, 6.8 MMBtu/hr; fired with natural gas and/or LPG; fuel capacity: natural gas - 0.0065 10 <sup>6</sup> scf/hr; LPG - 0.075 10 <sup>3</sup> gal/hr; installed 1998	Stahl/6000 DDR	EP-13
EU0140	Melt Furnace #14 (Dept. 01-N); MHDR aluminum - 1.65 ton/hr, 12.8 MMBtu/hr; fired with natural gas and/or LPG; fuel capacity: natural gas - 0.012 10 <sup>6</sup> scf/hr; LPG - 0.14 10 <sup>3</sup> gal/hr; installed 2000	Stahl/10000 DDR	EP-14
EU0150	Melt Furnace #21 (Dept. 02); MHDR aluminum - 0.5 ton/hr, 3.1 MMBtu/hr; fired with natural gas and/or LPG; fuel capacity: natural gas - 0.0030 10 <sup>6</sup> scf/hr; LPG - 0.034 10 <sup>3</sup> gal/hr; installed 1986	Stahl/3000 DDR	EP-21
EU0160	Melt Furnace #22 (Dept. 02); MHDR aluminum - 0.5 ton/hr, 3.1 MMBtu/hr; fired with natural gas and/or LPG; fuel capacity: natural gas - 0.0030 10 <sup>6</sup> scf/hr; LPG - 0.034 10 <sup>3</sup> gal/hr; installed 1986	Stahl/3000 DDR	EP-22
EU0170	Melt Furnace #23 (Dept. 02); MHDR aluminum - 0.5 ton/hr, 3.4 MMBtu/hr; fired with natural gas and/or LPG; fuel capacity: natural gas - 0.0032 10 <sup>6</sup> scf/hr; LPG - 0.038 10 <sup>3</sup> gal/hr; installed 1986	Stahl/3000 DDR	EP-23
EU0180	Melt Furnace #24 (Dept. 02); MHDR aluminum - 0.5 ton/hr, 3.1 MMBtu/hr; fired with natural gas and/or LPG; fuel capacity: natural gas - 0.0030 10 <sup>6</sup> scf/hr; LPG - 0.034 10 <sup>3</sup> gal/hr; installed 2000	Stahl/3000 DDR	EP-24

<b>EU0010 THROUGH EU0260 – MELT FURNACES</b>			
<b>Emission Unit</b>	<b>Description</b>	<b>Manufacturer/ Model #</b>	<b>2004 EIQ #</b>
EU0190	Melt Furnace #25 (Dept. 02); MHDR aluminum - 0.25 ton/hr, 1.65 MMBtu/hr; fired with natural gas and/or LPG; fuel capacity: natural gas - 0.0016 10 <sup>6</sup> scf/hr; LPG - 0.018 10 <sup>3</sup> gal/hr; installed 1987	Stahl/ 1500 DDR	EP-25
EU0200	Melt Furnace #26 (Dept. 02); MHDR aluminum - 0.5 ton/hr, 3.4 MMBtu/hr; fired with natural gas and/or LPG; fuel capacity: natural gas - 0.0032 10 <sup>6</sup> scf/hr; LPG - 0.038 10 <sup>3</sup> gal/hr; installed 1994	Stahl/ 3000 DDR	EP-26
EU0210	Melt Furnace #27 (Dept. 02); MHDR aluminum - 0.47 ton/hr, 3.4 MMBtu/hr; fired with natural gas and/or LPG; fuel capacity: natural gas - 0.0032 10 <sup>6</sup> scf/hr; LPG - 0.038 10 <sup>3</sup> gal/hr; installed 1986	Stahl/ 2800 DDR	EP-27
EU0220	Melt Furnace #28 (Dept. 02); MHDR aluminum - 0.21 ton/hr, 1.37 MMBtu/hr; fired with natural gas and/or LPG; fuel capacity: natural gas - 0.0013 10 <sup>6</sup> scf/hr; LPG - 0.015 10 <sup>3</sup> gal/hr; installed 1986	Stahl/ 550 DDR	EP-28
EU0230	Melt Furnace #29 (Dept. 02); MHDR aluminum - 0.75 ton/hr, 4.95 MMBtu/hr; fired with natural gas and/or LPG; fuel capacity: natural gas - 0.0047 10 <sup>6</sup> scf/hr; LPG - 0.055 10 <sup>3</sup> gal/hr; installed 1986	Stahl/ 4500 DDR	EP-29
EU0240	Melt Furnace #30 (Dept. 02); MHDR aluminum - 0.75 ton/hr, 4.95 MMBtu/hr; fired with natural gas and/or LPG; fuel capacity: natural gas - 0.0047 10 <sup>6</sup> scf/hr; LPG - 0.055 10 <sup>3</sup> gal/hr; installed 1986	Stahl/ 4500 DDR	EP-30
EU0250	Melt Furnace #31 (Dept. 02); MHDR aluminum - 0.75 ton/hr, 4.8 MMBtu/hr; fired with natural gas and/or LPG; fuel capacity: natural gas - 0.0046 10 <sup>6</sup> scf/hr; LPG - 0.053 10 <sup>3</sup> gal/hr; installed 1996	Stahl/ 4500 DDR	EP-31
EU0260	Melt Furnace #32 (Dept. 02); MHDR aluminum - 0.75 ton/hr, 4.95 MMBtu/hr; fired with natural gas and/or LPG; fuel capacity: natural gas - 0.0047 10 <sup>6</sup> scf/hr; LPG - 0.055 10 <sup>3</sup> gal/hr; installed 1986	Stahl/ 4500 DDR	EP-32

**PERMIT CONDITION (EU0010 THROUGH EU0260)-001**

10 CSR 10-6.220 Restriction of Emission of Visible Air Contaminants

**Emission Limitations:**

- 1) No owner or other person shall cause or permit emissions to be discharged into the atmosphere from any source any visible emissions with an opacity greater than 20%.

- 2) Exception: A person may discharge into the atmosphere from any source of emissions for a period(s) aggregating not more than six (6) minutes in any 60 minutes air contaminants with an opacity up to 60%.

**Monitoring:**

- 1) The permittee shall conduct opacity readings on these emission units (EU0010 through EU0260) using the procedures contained in USEPA Test Method 22. At a minimum, the observer should be trained and knowledgeable about the effects on visibility of emissions caused by background contrast, ambient lighting, observer position relative to lighting, wind and the presence of uncombined water. Readings are only required when the emission unit is operating and when the weather conditions allow. If no visible or other significant emissions are observed using these procedures, then no further observations would be required. For emission units with visible emissions perceived or believed to exceed the applicable opacity standard, the source representative would then conduct a Method 9 observation.
- 2) The following monitoring schedule must be maintained:
  - a) Weekly observations shall be conducted for a minimum of eight consecutive weeks after permit issuance. Should no violation of this regulation be observed during this period then-
  - b) Observations must be made once every two weeks for a period of eight weeks. If a violation is noted, monitoring reverts to weekly. Should no violation of this regulation be observed during this period then-
  - c) Observations must be made semi-annually. If a violation is noted, monitoring reverts to weekly. If the source reverts to weekly monitoring at any time, monitoring frequency will progress in an identical manner from the initial monitoring frequency. If the source has already performed the weekly and biweekly monitoring and is doing monitoring in compliance with a previous permit, the weekly and biweekly monitoring do not need to be repeated.

**Recordkeeping:**

- 1) The permittee shall maintain records of all observation results (See Attachment C1 or C2.), noting:
  - a) Whether any air emissions (except for water vapor) were visible from the emission units,
  - b) All emission units from which visible emissions occurred, and
  - c) Whether the visible emissions were normal for the process.
- 2) The permittee shall maintain records of any equipment malfunctions which result in visible air emissions. (See Attachment D.)
- 3) The permittee shall maintain records of any Method 9 test performed in accordance with this permit condition. (See Attachment E.)
- 4) Attachments C1, C2, D and E contain logs including these recordkeeping requirements. These logs, or an equivalent created by the permittee, must be used to certify compliance with this requirement.
- 5) The permittee shall maintain these records for the most recent five years. They must be maintained on-site for two years. They may be kept in either written or electronic form.
- 6) The permittee shall immediately make these records available for inspection to any Department of Natural Resources personnel upon request.

**Reporting:**

- 1) The permittee shall report to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the permittee determined using the Method 9 test that the emission unit(s) exceeded the opacity limit.

- 2) Reports of any deviations from monitoring, recordkeeping and reporting requirements of this permit condition shall be submitted annually, in the annual monitoring report and annual compliance certification, as required by Section V of this permit.

**PERMIT CONDITION (EU0010 THROUGH EU0260)-002**

10 CSR 10-6.260 Restriction of Emission of Sulfur Compounds

**Emission Limitations:**

- 1) Emissions from any new source operation shall not contain more than five hundred parts per million by volume (500 ppmv) of sulfur dioxide.
- 2) Stack gasses shall not contain more than thirty-five milligrams (35 mg) per cubic meter of sulfuric acid or sulfur trioxide or any combination of those gases averaged on any consecutive three-hour time period.

**Operational Limitation/Equipment Specifications:**

These emission units (EU0010 through EU0260) shall be limited to burning pipeline grade natural gas or liquefied petroleum gas or any combination of these fuels.

**Monitoring/Recordkeeping:**

- 1) The permittee shall maintain documentation supporting that the fuels used in these emission units are pipeline grade natural gas or liquefied petroleum gas or a combination of these fuels.
- 2) The permittee shall maintain these records for the most recent five years. They must be maintained on-site for two years. They may be kept in either written or electronic form.
- 3) The permittee shall immediately make these records available for inspection to any Department of Natural Resources personnel upon request.

**Reporting:**

Reports of any deviations from monitoring, recordkeeping and reporting requirements of this permit condition shall be submitted annually, in the annual monitoring report and annual compliance certification, as required by Section V of this permit.

Note: The current version of 10 CSR 10-6.260 (May 30, 2004, effective date) exempts combustion equipment that exclusively uses pipeline grade natural gas or liquefied petroleum gas, or any combination of these fuels, from the requirements of this rule. Therefore, when the provisions of the current version of 10 CSR 10-6.260 are incorporated into the federally approved SIP as a final EPA action, the emission units will not be subject to 10 CSR 10-6.260 and this permit condition will no longer be an applicable requirement in this operating permit.

**PERMIT CONDITION (EU0070 AND EU0080)-003**

10 CSR 10-6.060 Construction Permits Required  
Construction Permit #0195-012, Issued January 8, 1995

**Emission Limitation:**

The permittee shall emit no more than 15 tons of particulate matter less than ten microns (PM<sub>10</sub>) from the Melt Furnaces #7 and #8 (EU0070 and EU0080) in any consecutive 12-month period.

**Monitoring/Recordkeeping/Reporting:**

Calculations demonstrating that these units are always in compliance with the emission limitation in this permit condition are in Attachment F. The permittee shall keep this attachment with the rest of this permit. No additional monitoring, recordkeeping or reporting is required for this permit condition.

**PERMIT CONDITION (EU0090 AND EU0100)-004**

10 CSR 10-6.060 Construction Permits Required  
Construction Permit #0695-002, Issued May 22, 1995

**Emission Limitation:**

The permittee shall not emit particulate matter in any one (1) hour from Furnace Stacks #N9 and N10, (EU0090 and EU0100), in excess of 12.37 pounds.

**Monitoring/Recordkeeping/Reporting:**

Calculations demonstrating that these units are always in compliance with the emission limitation in this permit condition are in Attachment F. The permittee shall keep this attachment with the rest of this permit. No additional monitoring, recordkeeping or reporting is required for this permit condition.

EU0270 – INCINERATOR			
Emission Unit	Description	Manufacturer/ Model #	2004 EIQ #
EU0270	Incineration of waste material; MHDR/waste: 0.0375 ton/hr, 0.6 MMBtu/hr; fired with natural gas and/or LPG; fuel capacity: natural gas - 0.00057 10 <sup>6</sup> scf/hr; LPG - 0.00663 10 <sup>3</sup> gal/hr; installed 1977	Kelly-Hollison 380	EP-42

**PERMIT CONDITION EU0270-001**

10 CSR 10-6.060 Construction Permits Required  
Construction Permit #0277-001, Issued February 7, 1977

**Emission Limitations:**

- 1) The permittee shall not operate the Incinerator (EU0270) more than 8 hours per day, more than 6 days per week, or more than 51 weeks per year.
- 2) The permittee shall not burn in EU0270 more than 600 pounds of waste material per day.
- 3) The permittee shall not cause or permit emissions to be discharged into the atmosphere from EU0270 any visible emissions with an opacity greater than 20%.
- 4) The concentration of particulate matter in the exhaust gases shall not exceed 0.30 grain per standard cubic feet of exhaust gases.

**Monitoring/Recordkeeping:**

- 1) The permittee shall maintain a record of the hours of operation and of the weight of material burned each day. (See Attachment G)
- 2) The permittee shall maintain these records for the most recent five years. They must be maintained on-site for two years. They may be kept in either written or electronic form.

- 3) The permittee shall immediately make these records available for inspection to any Department of Natural Resources personnel upon request.

**Reporting:**

Reports of any deviations from monitoring, recordkeeping and reporting requirements of this permit condition shall be submitted annually, in the annual monitoring report and annual compliance certification, as required by Section V of this permit.

**PERMIT CONDITION EU0270-002**

10 CSR 10-6.260 Restriction of Emission of Sulfur Compounds

**Emission Limitations:**

- 1) Emissions from any source operation shall not contain more than five hundred parts per million by volume (500 ppmv) of sulfur dioxide.
- 2) Stack gasses shall not contain more than thirty-five milligrams (35 mg) per cubic meter of sulfuric acid or sulfur trioxide or any combination of those gases averaged on any consecutive three-hour time period.

**Operational Limitation/Equipment Specifications:**

This emission unit (EU0270) shall be limited to burning pipeline grade natural gas or liquefied petroleum gas or any combination of these fuels.

**Monitoring/Recordkeeping:**

- 1) The permittee shall maintain documentation supporting that the fuels used in these emission units are pipeline grade natural gas or liquefied petroleum gas or a combination of these fuels.
- 2) The permittee shall maintain this documentation for the most recent five years. It must be maintained on-site for two years. It may be kept in either written or electronic form.
- 3) The permittee shall immediately make this documentation available for inspection to any Department of Natural Resources personnel upon request.

**Reporting:**

Reports of any deviations from monitoring, recordkeeping and reporting requirements of this permit condition shall be submitted annually, in the annual monitoring report and annual compliance certification, as required by Section V of this permit.

Note: The current version of 10 CSR 10-6.260 (May 30, 2004, effective date) exempts combustion equipment that exclusively uses pipeline grade natural gas or liquefied petroleum gas, or any combination of these fuels, from the requirements of this rule. Therefore, when the provisions of the current version of 10 CSR 10-6.260 are incorporated into the federally approved SIP as a final EPA action, the emission units will not be subject to 10 CSR 10-6.260 and this permit condition will no longer be an applicable requirement in this operating permit.

EU0280 – CORE BURNOUT OVENS			
Emission Unit	Description	Manufacturer/Model #	2004 EIQ #
EU0280	Ovens; MHDR 0.6 MMBtu/hr (total); capable of burning both natural gas and liquid petroleum gas	Unknown	EP-43

**PERMIT CONDITION EU0280-001**

10 CSR 10-3.060 Maximum Allowable Emissions of Particulate Matter From Fuel Burning  
Equipment Used for Indirect Heating

**Emission Limitation:**

- 1) The permittee shall not emit particulate matter in excess of 0.23 lb/MMBtu from EU0280.
- 2) This emission rate was calculated using the following equation for new indirect heating sources:

$$E = 1.31(Q)^{-0.338}$$

Where: E = the maximum allowable particulate emission rate in lb/MMBtu of heat input; and

Q = the installation heat input in millions of Btu per hour

**Operational Limitation/Equipment Specifications:**

These emission units shall be limited to burning pipeline grade natural gas and liquefied petroleum gas or any combination of these fuels.

**Monitoring/Recordkeeping:**

- 1) The permittee shall maintain documentation supporting that the fuel used in EU0280 is pipeline grade natural gas or liquefied petroleum gas or a combination of these fuels.
- 2) The permittee shall maintain this documentation for the most recent five years. It must be maintained on-site for two years. It may be kept in either written or electronic form.
- 3) The permittee shall immediately make this documentation available for inspection to any Department of Natural Resources personnel upon request.
- 4) When in compliance with the operational limitation/equipment specifications in this permit condition, the permittee will also be in compliance with its emission limitation. Calculations demonstrating this are in Attachment H. The permittee shall keep this attachment with the rest of this permit.

**Reporting:**

Reports of any deviations from monitoring, recordkeeping and reporting requirements of this permit condition shall be submitted annually, in the annual monitoring report and annual compliance certification, as required by Section V of this permit.

**PERMIT CONDITION EU0280-002**

10 CSR 10-6.220 Restriction of Emission of Visible Air Contaminants

**Emission Limitation:**

- 1) No owner or other person shall cause or permit emissions to be discharged into the atmosphere from any source any visible emissions with an opacity greater than 20%.
- 2) Exception: A person may discharge into the atmosphere from any source of emissions for a period(s) aggregating not more than six (6) minutes in any 60 minutes air contaminants with an opacity up to 60%.

**Monitoring:**

- 1) The permittee shall conduct opacity readings on this emission unit (EU0280) using the procedures contained in USEPA Test Method 22. At a minimum, the observer should be trained and

knowledgeable about the effects on visibility of emissions caused by background contrast, ambient lighting, observer position relative to lighting, wind and the presence of uncombined water. Readings are only required when the emission unit is operating and when the weather conditions allow. If no visible or other significant emissions are observed using these procedures, then no further observations would be required. For emission units with visible emissions perceived or believed to exceed the applicable opacity standard, the source representative would then conduct a Method 9 observation.

- 2) The following monitoring schedule must be maintained:
  - a) Weekly observations shall be conducted for a minimum of eight consecutive weeks after permit issuance. Should no violation of this regulation be observed during this period then-
  - b) Observations must be made once every two weeks for a period of eight weeks. If a violation is noted, monitoring reverts to weekly. Should no violation of this regulation be observed during this period then-
  - c) Observations must be made semi-annually. If a violation is noted, monitoring reverts to weekly. If the source reverts to weekly monitoring at any time, monitoring frequency will progress in an identical manner from the initial monitoring frequency. If the source has already performed the weekly and biweekly monitoring and is doing monitoring in compliance with a previous permit, the weekly and biweekly monitoring do not need to be repeated.

**Recordkeeping:**

- 1) The permittee shall maintain records of all observation results (see Attachment C1 or C2), noting:
  - a) Whether any air emissions (except for water vapor) were visible from the emission units,
  - b) All emission units from which visible emissions occurred, and
  - c) Whether the visible emissions were normal for the process.
- 2) The permittee shall maintain records of any equipment malfunctions that result in visible air emissions. (see Attachment D.)
- 3) The permittee shall maintain records of any Method 9 test performed in accordance with this permit condition. (see Attachment E.)
- 4) Attachments C1 or C2, D and E contain logs including these recordkeeping requirements. These logs, or an equivalent created by the permittee, must be used to certify compliance with this requirement.
- 5) The permittee shall maintain these records for the most recent five years. They must be maintained on-site for two years. They may be kept in either written or electronic form.
- 6) The permittee shall immediately make these records available for inspection to any Department of Natural Resources personnel upon request.

**Reporting:**

- 1) The permittee shall report to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the permittee determined using the Method 9 test that the emission unit(s) exceeded the opacity limit.
- 2) Reports of any deviations from monitoring, recordkeeping and reporting requirements of this permit condition shall be submitted annually, in the annual monitoring report and annual compliance certification, as required by Section V of this permit.

**PERMIT CONDITION EU0280-003**

10 CSR 10-6.260 Restriction of Emission of Sulfur Compounds



**Emission Limitation:**

No person shall cause or allow emissions of sulfur dioxide into the atmosphere from any indirect heating source in excess of eight pounds of sulfur dioxide per million BTUs actual heat input averaged on any consecutive three hour time period

**Operational Limitation/Equipment Specifications:**

This emission unit (EU0280) shall be limited to burning pipeline grade natural gas and liquefied petroleum gas or any combination of these fuels.

**Monitoring/Recordkeeping:**

- 1) The permittee shall maintain documentation supporting that the fuels used in this emission unit are pipeline grade natural gas or liquefied petroleum gas or a combination of these fuels.
- 2) The permittee shall maintain this documentation for the most recent five years. It must be maintained on-site for two years. It may be kept in either written or electronic form.
- 3) The permittee shall immediately make this documentation available for inspection to any Department of Natural Resources personnel upon request.

**Reporting:**

Reports of any deviations from monitoring, recordkeeping and reporting requirements of this permit condition shall be submitted annually, in the annual monitoring report and annual compliance certification, as required by Section V of this permit.

Note: The current version of 10 CSR 10-6.260 (May 30, 2004, effective date) exempts combustion equipment that exclusively uses pipeline grade natural gas or liquefied petroleum gas, or any combination of these fuels, from the requirements of this rule. Therefore, when the provisions of the current version of 10 CSR 10-6.260 are incorporated into the federally approved SIP as a final EPA action, the emission units will not be subject to 10 CSR 10-6.260 and this permit condition will no longer be an applicable requirement in this operating permit.

EU0290 AND EU0300 - PAINT SPRAY BOOTHS			
Emission Unit	Description	Manufacturer/Model #	2004 EIQ #
EU0290	Spray paint booth; MHDR 1 gal/hr; equipped with panel filter	Unknown	EP-44
EU0300	Small spray paint booth in the wood shop; MHDR 1 gal/hr; equipped with panel filter	Unknown	EP-49

**PERMIT CONDITION (EU0290 AND EU0300)-001**

10 CSR 10-6.400 Restriction of Emission of Particulate Matter From Industrial Processes

**Emission Limitations:**

- 1) The permittee shall not emit particulate matter from EU0290 in excess of 0.5 lb/hr.
- 2) The permittee shall not emit particulate matter from EU0300 in excess of 0.5 lb/hr.

**Monitoring:**

- 1) Coating operations equipped with filters shall not be operated without a filter in place.
- 2) The filters shall be inspected for holes, imperfections, proper installation or other problems that could hinder the effectiveness of the filter.

- 3) The filters shall be inspected each shift before spraying begins and after installation of a new filter.
- 4) The manufacturer's recommendations shall be followed with regard to installation and frequency of replacement of the filters.

**Recordkeeping:**

- 1) The permittee shall maintain records of the inspections of filters including when they occur. (See Attachment D.)
- 2) The permittee shall maintain these records for the most recent five years. They must be maintained on-site for two years. They may be kept in either written or electronic form.
- 3) The permittee shall immediately make these records available for inspection to any Department of Natural Resources personnel upon request.

**Reporting:**

Reports of any deviations from monitoring, recordkeeping and reporting requirements of this permit condition shall be submitted annually, in the annual monitoring report and annual compliance certification, as required by Section V of this permit.

EU0310 – SAND CORE CURING PROCESS			
Emission Unit	Description	Manufacturer/Model #	2004 EIQ #
EU0310	Curing of sand core using sulfur dioxide (catalyst); MHDR 0.05 ton SO <sub>2</sub> /hr; equipped with wet scrubber (CD-01) with 95% capture efficiency and 99% control efficiency; installed pre-2/24/1971	Unknown	EP-54

PERMIT CONDITION EU0310-001
10 CSR 10-6.260 Restriction of Emission of Sulfur Compounds

**Emission Limitations:**

- 1) Emissions from EU0310 shall not contain more than two thousand parts per million by volume (2000 ppmv) of sulfur dioxide.
- 2) Stack gasses shall not contain more than seventy milligrams (70 mg) per cubic meter of sulfuric acid or sulfur trioxide or any combination of those gases averaged on any consecutive three hour time period.
- 3) The permittee shall not cause or permit the emission of sulfur compounds from any source which causes or contributes to concentrations exceeding those specified in 10 CSR 10-6.010 Ambient Air Quality Standards.

Pollutant	Concentration by Volume*	Remarks
Sulfur Dioxide (SO <sub>2</sub> )	0.03 (ppm) (80 µg/m <sup>3</sup> )	Annual arithmetic mean
	0.14 ppm (365 µg/m <sup>3</sup> )	24-hour average not to be exceeded more than once per year
	0.5 ppm (1300 µg/m <sup>3</sup> )	3-hour average not to be exceeded more than once per year

Hydrogen Sulfide (H <sub>2</sub> S)	0.05 ppm (70 µg/m <sup>3</sup> )	½-hour average not to be exceeded over 2 times per year
	0.03 ppm (42 µg/m <sup>3</sup> )	½-hour average not to be exceeded over 2 times in any 5 consecutive days
Sulfuric Acid (H <sub>2</sub> SO <sub>4</sub> )	10 µg/m <sup>3</sup>	24-hour average not to be exceeded more than once in any 90 consecutive days
	30 µg/m <sup>3</sup>	1-hour average not to be exceeded more than once in any 2 consecutive days

\* Concentration by Volume is given in both parts per million (ppm) and micrograms per cubic meter (µg/m<sup>3</sup>)

**Monitoring:**

- 1) The permittee shall continuously monitor the SO<sub>2</sub> emissions at the area of sand core fabrication.
- 2) The permittee shall calibrate, maintain and operate the continuous SO<sub>2</sub> monitor and the wet scrubber according to manufacturers' specifications and recommendations.

**Recordkeeping:**

- 1) The permittee shall maintain records of the SO<sub>2</sub> emissions at the area of sand core fabrication.
- 2) The permittee shall maintain a copy of the manufacturers' specifications and recommendations for the continuous SO<sub>2</sub> monitor and the wet scrubber.
- 3) The permittee shall maintain records of the calibrations and maintenance of the continuous SO<sub>2</sub> monitor and the wet scrubber.
- 4) The permittee shall maintain these records for the most recent five years. They must be maintained on-site for two years. They may be kept in either written or electronic form.
- 5) The permittee shall immediately make these records available for inspection to any Department of Natural Resources personnel upon request.

**Reporting:**

Reports of any deviations from monitoring, recordkeeping and reporting requirements of this permit condition shall be submitted annually, in the annual monitoring report and annual compliance certification, as required by Section V of this permit.

## IV. Core Permit Requirements

The installation shall comply with each of the following requirements. Consult the appropriate sections in the Code of Federal Regulations (CFR), Code of State Regulations (CSR), and local ordinances for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued.

### **10 CSR 10-6.050 Start-up, Shutdown and Malfunction Conditions**

- 1) In the event of a malfunction, which results in excess emissions that exceed one hour, the permittee shall submit to the director within two business days, in writing, the following information:
  - a) Name and location of installation;
  - b) Name and telephone number of person responsible for the installation;
  - c) Name of the person who first discovered the malfunction and precise time and date that the malfunction was discovered.
  - d) Identity of the equipment causing the excess emissions;
  - e) Time and duration of the period of excess emissions;
  - f) Cause of the excess emissions;
  - g) Air pollutants involved;
  - h) Best estimate of the magnitude of the excess emissions expressed in the units of the applicable requirement and the operating data and calculations used in estimating the magnitude;
  - i) Measures taken to mitigate the extent and duration of the excess emissions; and
  - j) Measures taken to remedy the situation that caused the excess emissions and the measures taken or planned to prevent the recurrence of these situations.
- 2) The permittee shall submit the paragraph 1 information list to the director in writing at least ten days prior to any maintenance, start-up or shutdown, which is expected to cause an excessive release of emissions that exceed one hour. If notice of the event cannot be given ten days prior to the planned occurrence, it shall be given as soon as practicable prior to the release. If an unplanned excess release of emissions exceeding one hour occurs during maintenance, start-up or shutdown, the director shall be notified verbally as soon as practical during normal working hours and no later than the close of business of the following working day. A written notice shall follow within ten working days.
- 3) Upon receipt of a notice of excess emissions issued by an agency holding a certificate of authority under section 643.140, RSMo, the permittee may provide information showing that the excess emissions were the consequence of a malfunction, start-up or shutdown. The information, at a minimum, should be the paragraph 1 list and shall be submitted not later than 15 days after receipt of the notice of excess emissions. Based upon information submitted by the permittee or any other pertinent information available, the director or the commission shall make a determination whether the excess emissions constitute a malfunction, start-up or shutdown and whether the nature, extent and duration of the excess emissions warrant enforcement action under section 643.080 or 643.151, RSMo.
- 4) Nothing in this rule shall be construed to limit the authority of the director or commission to take appropriate action, under sections 643.080, 643.090 and 643.151, RSMo to enforce the provisions of the Air Conservation Law and the corresponding rule.
- 5) Compliance with this rule does not automatically absolve the permittee of liability for the excess emissions reported.

#### **10 CSR 10-6.060 Construction Permits Required**

The permittee shall not commence construction, modification, or major modification of any installation subject to this rule, begin operation after that construction, modification, or major modification, or begin operation of any installation which has been shut down longer than five years without first obtaining a permit from the permitting authority.

#### **10 CSR 10-6.065 Operating Permits**

The permittee shall file a complete application for renewal of this operating permit at least six months before the date of permit expiration. In no event shall this time be greater than eighteen months. [10 CSR 10-6.065(5)(B)1.A(III)] The permittee shall retain the most current operating permit issued to this installation on-site. [10 CSR 10-6.065, §(5)(C)(1) and §(6)(C)1.C(II)] The permittee shall immediately make such permit available to any Missouri Department of Natural Resources personnel upon request. [10 CSR 10-6.065, §(5)(C)(1) and §(6)(C)3.B]

#### **10 CSR 10-6.110 Submission of Emission Data, Emission Fees and Process Information**

- 1) The permittee shall complete and submit an Emission Inventory Questionnaire (EIQ) in accordance with the requirements outlined in this rule.
- 2) The permittee shall pay an annual emission fee per ton of regulated air pollutant emitted according to the schedule in the rule. This fee is an emission fee assessed under authority of RSMo. 643.079.
- 3) The fees shall be due April 1 each year for emissions produced during the previous calendar year. The fees shall be payable to the Department of Natural Resources and shall be accompanied by the Emissions Inventory Questionnaire (EIQ) form or equivalent approved by the director.

#### **10 CSR 10-6.130 Controlling Emissions During Episodes of High Air Pollution Potential**

This rule specifies the conditions that establish an air pollution alert (yellow/orange/red/purple), or emergency (maroon) and the associated procedures and emission reduction objectives for dealing with each. The permittee shall submit an appropriate emergency plan if required by the Director.

#### **10 CSR 10-6.150 Circumvention**

The permittee shall not cause or permit the installation or use of any device or any other means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission or air contaminant which violates a rule of the Missouri Air Conservation Commission.

#### **10 CSR 10-6.170 Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin**

- 1) The permittee shall not cause or allow to occur any handling, transporting or storing of any material; construction, repair, cleaning or demolition of a building or its appurtenances; construction or use of a road, driveway or open area; or operation of a commercial or industrial installation without applying reasonable measures as may be required to prevent, or in a manner which allows or may allow, fugitive particulate matter emissions to go beyond the premises of origin in quantities that the particulate matter may be found on surfaces beyond the property line of origin. The nature or origin of the particulate matter shall be determined to a reasonable degree of certainty by a technique proven to be accurate and approved by the director.
- 2) The permittee shall not cause nor allow to occur any fugitive particulate matter emissions to remain visible in the ambient air beyond the property line of origin.

- 3) Should it be determined that noncompliance has occurred, the director may require reasonable control measures as may be necessary. These measures may include, but are not limited to, the following:
  - a) Revision of procedures involving construction, repair, cleaning and demolition of buildings and their appurtenances that produce particulate matter emissions;
  - b) Paving or frequent cleaning of roads, driveways and parking lots;
  - c) Application of dust-free surfaces;
  - d) Application of water; and
  - e) Planting and maintenance of vegetative ground cover.

#### **10 CSR 10-6.180 Measurement of Emissions of Air Contaminants**

- 1) The director may require any person responsible for the source of emission of air contaminants to make or have made tests to determine the quantity or nature, or both, of emission of air contaminants from the source. The director may specify testing methods to be used in accordance with good professional practice. The director may observe the testing. All tests shall be performed by qualified personnel.
- 2) The director may conduct tests of emissions of air contaminants from any source. Upon request of the director, the person responsible for the source to be tested shall provide necessary ports in stacks or ducts and other safe and proper sampling and testing facilities, exclusive of instruments and sensing devices as may be necessary for proper determination of the emission of air contaminants.
- 3) The director shall be given a copy of the test results in writing and signed by the person responsible for the tests.

#### **10 CSR 10-3.030 Open Burning Restrictions**

- 1) The permittee shall not conduct, cause, permit or allow a salvage operation, the disposal of trade wastes or burning of refuse by open burning.
- 2) Exception - Open burning of trade waste or vegetation may be permitted only when it can be shown that open burning is the only feasible method of disposal or an emergency exists which requires open burning.
- 3) Any person intending to engage in open burning shall file a request to do so with the director. The request shall include the following:
  - a) The name, address and telephone number of the person submitting the application; The type of business or activity involved; A description of the proposed equipment and operating practices, the type, quantity and composition of trade wastes and expected composition and amount of air contaminants to be released to the atmosphere where known;
  - b) The schedule of burning operations;
  - c) The exact location where open burning will be used to dispose of the trade wastes;
  - d) Reasons why no method other than open burning is feasible; and
  - e) Evidence that the proposed open burning has been approved by the fire control authority which has jurisdiction.
- 4) Upon approval of the open burning permit application by the director, the person may proceed with the operation under the terms of the open burning permit. Be aware that such approval shall not exempt ThyssenKrupp Stahl Company - Kingsville Plant from the provisions of any other law, ordinance or regulation.
- 5) The permittee shall maintain files with letters from the director approving the open burning operation and previous DNR inspection reports.

### **10 CSR 10-3.090 Restriction of Emission of Odors**

No person may cause, permit or allow the emission of odorous matter in concentrations and frequencies or for durations that odor can be perceived when one volume of odorous air is diluted with seven volumes of odor-free air for two separate trials not less than 15 minutes apart within the period of one hour.

**This requirement is not federally enforceable.**

### **Title VI – 40 CFR Part 82 Protection of Stratospheric Ozone**

- 1) The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
  - a) All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to §82.106.
  - b) The placement of the required warning statement must comply with the requirements pursuant to §82.108.
  - c) The form of the label bearing the required warning statement must comply with the requirements pursuant to §82.110.
  - d) No person may modify, remove, or interfere with the required warning statement except as described in §82.112.
- 2) The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners (MVACs) in Subpart B:
  - a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156.
  - b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158.
  - c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to §82.161.
  - d) Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with recordkeeping requirements pursuant to §82.166. ("MVAC-like" appliance as defined at §82.152).
  - e) Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to §82.156.
  - f) Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.
- 3) If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.
- 4) If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant.

The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program. *Federal Only - 40 CFR part 82*

#### **10 CSR 10-6.280 Compliance Monitoring Usage**

- 1) The permittee is not prohibited from using the following in addition to any specified compliance methods for the purpose of submission of compliance certificates:
  - a) Monitoring methods outlined in 40 CFR Part 64;
  - b) Monitoring method(s) approved for the permittee pursuant to 10 CSR 10-6.065, "Operating Permits", and incorporated into an operating permit; and
  - c) Any other monitoring methods approved by the director.
- 2) Any credible evidence may be used for the purpose of establishing whether a permittee has violated or is in violation of any such plan or other applicable requirement. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred by a permittee:
  - a) Monitoring methods outlined in 40 CFR Part 64;
  - b) A monitoring method approved for the permittee pursuant to 10 CSR 10-6.065, "Operating Permits", and incorporated into an operating permit; and
  - c) Compliance test methods specified in the rule cited as the authority for the emission limitations.
- 3) The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:
  - a) Applicable monitoring or testing methods, cited in:
    - i) 10 CSR 10-6.030, "Sampling Methods for Air Pollution Sources";
    - ii) 10 CSR 10-6.040, "Reference Methods";
    - iii) 10 CSR 10-6.070, "New Source Performance Standards";
    - iv) 10 CSR 10-6.080, "Emission Standards for Hazardous Air Pollutants"; or
  - b) Other testing, monitoring, or information gathering methods, if approved by the director, that produce information comparable to that produced by any method listed above.



## V. General Permit Requirements

The installation shall comply with each of the following requirements. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued.

### **10 CSR 10-6.065, §(5)(C)1 and §(6)(C)1.B Permit Duration**

This permit is issued for a term of five years, commencing on the date of issuance. This permit will expire at the end of this period unless renewed.

### **10 CSR 10-6.065, §(5)(C)1 and §(6)(C)1.C General Recordkeeping and Reporting Requirements**

- 1) Recordkeeping
  - a) All required monitoring data and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report or application.
  - b) Copies of all current operating and construction permits issued to this installation shall be kept on-site for as long as the permits are in effect. Copies of these permits shall be made immediately available to any Missouri Department of Natural Resources personnel upon request.
- 2) Reporting
  - a) All reports shall be submitted to the Air Pollution Control Program, Enforcement Section, P. O. Box 176, Jefferson City, MO 65102.
  - b) The permittee shall submit a report of all required monitoring by:
    - i) April 1st for monitoring which covers the January through December time period.
    - ii) Exception. Monitoring requirements which require reporting more frequently than annually shall report no later than 30 days after the end of the calendar quarter in which the measurements were taken.
  - c) Each report shall identify any deviations from emission limitations, monitoring, recordkeeping, reporting, or any other requirements of the permit.
  - d) Submit supplemental reports as required or as needed. Supplemental reports are required no later than ten days after any exceedance of any applicable rule, regulation or other restriction. All reports of deviations shall identify the cause or probable cause of the deviations and any corrective actions or preventative measures taken.
    - i) Notice of any deviation resulting from an emergency (or upset) condition as defined in paragraph (6)(C)7 of 10 CSR 10-6.065 (Emergency Provisions) shall be submitted to the permitting authority either verbally or in writing within two working days after the date on which the emission limitation is exceeded due to the emergency, if the permittee wishes to assert an affirmative defense. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that indicate an emergency occurred and the permittee can identify the cause(s) of the emergency. The permitted installation must show that it was operated properly at the time and that during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or requirements in the permit. The notice must contain a description of the emergency, the steps taken to mitigate emissions, and the corrective actions taken.
    - ii) Any deviation that poses an imminent and substantial danger to public health, safety or the environment shall be reported as soon as practicable.

- iii) Any other deviations identified in the permit as requiring more frequent reporting than the permittee's annual report shall be reported on the schedule specified in this permit, and no later than ten days after any exceedance of any applicable rule, regulation, or other restriction.
- e) Every report submitted shall be certified by the responsible official, except that, if a report of a deviation must be submitted within ten days after the deviation, the report may be submitted without a certification if the report is resubmitted with an appropriate certification within ten days after that, together with any corrected or supplemental information required concerning the deviation.
- f) The permittee may request confidential treatment of information submitted in any report of deviation.

#### **10 CSR 10-6.065 §(5)(C)1 and §(6)(C)1.D Risk Management Plan Under Section 112(r)**

The permittee shall comply with the requirements of 40 CFR Part 68, Accidental Release Prevention Requirements. If the permittee has more than a threshold quantity of a regulated substance in process, as determined by 40 CFR Section 68.115, the permittee shall submit a Risk Management Plan in accordance with 40 CFR Part 68 no later than the latest of the following dates:

- 1) June 21, 1999;
- 2) Three years after the date on which a regulated substance is first listed under 40 CFR Section 68.130; or
- 3) The date on which a regulated substance is first present above a threshold quantity in a process.

#### **10 CSR 10-6.065(5)(C)1.A General Requirements**

- 1) The permittee must comply with all of the terms and conditions of this permit. Any noncompliance with a permit condition constitutes a violation and is grounds for enforcement action, permit termination, permit revocation and re-issuance, permit modification or denial of a permit renewal application.
- 2) The permittee may not use as a defense in an enforcement action that it would have been necessary for the permittee to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.
- 3) The permit may be modified, revoked, reopened, reissued or terminated for cause. Except as provided for minor permit modifications, the filing of an application or request for a permit modification, revocation and reissuance, or termination, or the filing of a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
- 4) This permit does not convey any property rights of any sort, nor grant any exclusive privilege.
- 5) The permittee shall furnish to the Air Pollution Control Program, upon receipt of a written request and within a reasonable time, any information that the Air Pollution Control Program reasonably may require to determine whether cause exists for modifying, reopening, reissuing or revoking the permit or to determine compliance with the permit. Upon request, the permittee also shall furnish to the Air Pollution Control Program copies of records required to be kept by the permittee. The permittee may make a claim of confidentiality for any information or records submitted under this rule.
- 6) Failure to comply with the limitations and conditions that qualify the installation for an Intermediate permit make the installation subject to the provisions of 10 CSR 10-6.065(6) and enforcement action for operating without a valid part 70 operating permit.

**10 CSR 10-6.065(5)(C)1.C Reasonably Anticipated Operating Scenarios**

None

**10 CSR 10-6.065, §(5)(B)4; §(5)(C)1, §(6)(C)3.B, and §(6)(C)3.D; and §(5)(C)3 and §(6)(C)3.E.(I) – (III) and (V) – (VI) Compliance Requirements**

- 1) Any document (including reports) required to be submitted under this permit shall contain a certification signed by the responsible official.
- 2) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized officials of the Missouri Department of Natural Resources, or their authorized agents, to perform the following (subject to the installation's right to seek confidential treatment of information submitted to, or obtained by, the Air Pollution Control Program):
  - a) Enter upon the premises where a permitted installation is located or an emissions-related activity is conducted, or where records must be kept under the conditions of this permit;
  - b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
  - c) Inspect, at reasonable times and using reasonable safety practices, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
  - d) As authorized by the Missouri Air Conservation Law, Chapter 643, RSMo or the Act, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the terms of this permit, and all applicable requirements as outlined in this permit.
- 3) All progress reports required under an applicable schedule of compliance shall be submitted semiannually (or more frequently if specified in the applicable requirement). These progress reports shall contain the following:
  - a) Dates for achieving the activities, milestones or compliance required in the schedule of compliance, and dates when these activities, milestones or compliance were achieved, and
  - b) An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measures adopted.
- 4) The permittee shall submit an annual certification that it is in compliance with all of the federally enforceable terms and conditions contained in this permit, including emissions limitations, standards, or work practices. These certifications shall be submitted annually by April 1st, unless the applicable requirement specifies more frequent submission. These certifications shall be submitted to the Air Pollution Control Program, Enforcement Section, P.O. Box 176, Jefferson City, MO 65102. All deviations and exceedances must be included in the compliance certifications. The compliance certification shall include the following:
  - a) The identification of each term or condition of the permit that is the basis of the certification;
  - b) The current compliance status, as shown by monitoring data and other information reasonably available to the installation;
  - c) Whether compliance was continuous or intermittent;
  - d) The method(s) used for determining the compliance status of the installation, both currently and over the reporting period; and
  - e) Such other facts as the Air Pollution Control Program will require in order to determine the compliance status of this installation.

**10 CSR 10-6.065, §(5)(C)1 and §(6)(C)7 Emergency Provisions**

- 1) An emergency or upset as defined in 10 CSR 10-6.065(6)(C)7.A shall constitute an affirmative defense to an enforcement action brought for noncompliance with technology-based emissions

limitations. To establish an emergency- or upset-based defense, the permittee must demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence, the following:

- a) That an emergency or upset occurred and that the permittee can identify the source of the emergency or upset,
  - b) That the installation was being operated properly,
  - c) That the permittee took all reasonable steps to minimize emissions that exceeded technology-based emissions limitations or requirements in this permit, and
  - d) That the permittee submitted notice of the emergency to the Air Pollution Control Program within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and any corrective actions taken.
- 2) Be aware that an emergency or upset shall not include noncompliance caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

#### **10 CSR 10-6.065(5)(C)5 Off-Permit Changes**

- 1) Except as noted below, the permittee may make any change in its permitted installation's operations, activities or emissions that is not addressed in, constrained by or prohibited by this permit without obtaining a permit revision. Off-permit changes shall be subject to the following requirements and restrictions:
  - a) The change must meet all applicable requirements of the Act and may not violate any existing permit term or condition; the permittee may not change a permitted installation without a permit revision if this change is a Title I modification; Please Note: Changes at the installation which affect the emission limitation(s) classifying the installation as an intermediate source (add additional equipment to the recordkeeping requirements, increase the emissions above major source level) do not qualify for off-permit changes.
  - b) The permittee must provide written notice of the change to the Air Pollution Control Program, Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 901 North 5th Street, Kansas City, Kansas 66101, no later than the next annual emissions report. This written notice shall describe each change, including the date, any change in emissions, pollutants emitted and any applicable requirement that would apply as a result of the change; and
  - c) The permittee shall keep a record describing all changes made at the installation that result in emissions of a regulated air pollutant subject to an applicable requirement and the emissions resulting from these changes

#### **10 CSR 10-6.020(2)(R)12 Responsible Official**

The application utilized in the preparation of this permit was signed by Jack Moore, President. On 11/22/05, the Air Pollution Control Program was informed that Franz Eckl, President, is now the responsible person. If this person terminates employment, or is reassigned different duties such that a different person becomes the responsible person to represent and bind the installation in environmental permitting affairs, the owner or operator of this air contaminant source shall notify the Director of the Air Pollution Control Program of the change. Said notification shall be in writing and shall be submitted within 30 days of the change. The notification shall include the name and title of the new person assigned by the source owner or operator to represent and bind the installation in environmental permitting affairs. All representations, agreement to terms and conditions and covenants made by the former responsible person that were used in the establishment of limiting permit conditions on this

permit will continue to be binding on the installation until such time that a revision to this permit is obtained that would change said representations, agreements and covenants.

**10 CSR 10-6.065 §(5)(E)4 and §(6)(E)6.A(III)(a)-(c) Reopening-Permit for Cause**

This permit may be reopened for cause if:

- 1) The Missouri Department of Natural Resources (MDNR) or EPA determines that the permit contains a material mistake or that inaccurate statements were made which resulted in establishing the emissions limitation standards or other terms of the permit,
- 2) Additional applicable requirements under the Act become applicable to the installation; however, reopening on this ground is not required if—:
  - a) The permit has a remaining term of less than three years;
  - b) The effective date of the requirement is later than the date on which the permit is due to expire;or
- c) The additional applicable requirements are implemented in a general permit that is applicable to the installation and the installation receives authorization for coverage under that general permit,
- 3) MDNR or EPA determines that the permit must be reopened and revised to assure compliance with applicable requirements.

**10 CSR 10-6.065 §(5)(E)1.A and §(6)(E)1.C Statement of Basis**

This permit is accompanied by a statement setting forth the legal and factual basis for the draft permit conditions (including references to applicable statutory or regulatory provisions). This Statement of Basis, while referenced by the permit, is not an actual part of the permit.

## **VI. ATTACHMENTS**

Attachments follow.

Draft

## ATTACHMENT A

### SO<sub>2</sub> Emission Tracking Record for Permit Condition PW004

This sheet covers the month of \_\_\_\_\_ in the year \_\_\_\_\_.

Column A	Column B	Column C	Column D	Column E
Emission Unit ID #(s)	Monthly Throughput (unit)	SO <sub>2</sub> Emission Factor (lb/unit)	Overall Control Efficiency (%)	SO <sub>2</sub> Emissions (tons)
<b>Combustion Units</b>				
EU0010 - EU0260				
EU0270				
EU0280				
Space Heaters				
<b>Incinerator</b>				
EU0270 Process		2.5		
EU0270 Combustion				
<b>Sand Core Curing Process</b>				
EU0310		2000		
(F) Current month's total SO <sub>2</sub> emissions, in tons:				
(G) Last month's 12-month running total SO <sub>2</sub> emissions, in tons:				
(H) Last year's same month's total SO <sub>2</sub> emissions, in tons:				
(I) Current 12-month running total SO <sub>2</sub> emissions, in tons: [(E) + (G) - (H)]				

**Instructions:**

- 1) Fill in Monthly Throughputs [Column B]. Use appropriate unit - 10<sup>6</sup> scf, for natural gas 10<sup>3</sup> gal for LPG, or ton for waste or sand.
- 2) Fill in appropriate SO<sub>2</sub> Emission Factors [Column C]:
  - a) For combustion units (EU0010 through EU0260, EU0280, and Space Heaters):
    - i) If fired with natural gas, factor is 0.6 lb/10<sup>6</sup> scf [From AP-42 Table 1.4-2].
    - ii) If fired with LPG, factor is 1.5 lb/10<sup>3</sup> gal [From AP-42 Table 1.5-1, using sulfur content S=15 gr/100 scf from Gas Processors Association Engineering Data Book (Ninth Edition, 1972), Figure 15-50 (GPA Liquefied Petroleum Gas Specifications, rev. 1979)].
  - b) For Incinerator (EU0270):
    - i) If process, factor is 2.5 lb/ton waste [From AP-42 Table 2.1-12]
    - ii) If combustion fired with natural gas, factor is 0.6 lb/10<sup>6</sup> scf, same as for combustion units
    - iii) If combustion fired with LPG, factor is 1.5 lb/10<sup>3</sup> gal, same as for combustion units
  - c) For Sand Core Curing Process (EU0310), this factor is 2000 lb/ton [From 2004 EIQ]
- 3) Fill in Overall Control Efficiencies [Column D].
- 4) SO<sub>2</sub> Emissions [Column E] = [Column B] X [Column C] X [1-(Column D/100)] X 0.0005 ton/lb
- 5) Line F = Sum of SO<sub>2</sub> Emissions [Column E]
- 6) Line G = Line I from Attachment A for last month
- 7) Line H = Line F from Attachment A for same month last year

- 8)  $\text{Line I} = \text{Line F} + \text{Line G} - \text{Line H}$ . **Installation is in compliance if current 12-month running total SO<sub>2</sub> emissions (Line I) is less than 100 tons.**

Draft

**ATTACHMENT B**  
**NO<sub>x</sub> Emission Tracking Record for Permit Condition PW004**

This sheet covers the month of \_\_\_\_\_ in the year \_\_\_\_\_.

Column A	Column B	Column C	Column D	Column E
Emission Unit ID #(s)	Monthly Throughput (unit)	NO <sub>x</sub> Emission Factor (lb/unit)	Overall Control Efficiency (%)	NO <sub>x</sub> Emissions (tons)
<b>Combustion Units</b>				
EU0010 - EU0260				
EU0280				
Space Heaters				
<b>Incinerator</b>				
EU0270 Process				
EU0270 Combustion				
(F) Total NO <sub>x</sub> emissions calculated for this month, in tons:				
(G) 12-month NO <sub>x</sub> emissions total from previous month's Attachment B, in tons:				
(H) Monthly NO <sub>x</sub> emissions total (c) from previous year's Attachment B, in tons				
(I) Current 12-month total of NO <sub>x</sub> emissions, in tons: [(F) + (G) - (H)]				

**Instructions:**

- Fill in Monthly Throughputs [Column B]. Use appropriate unit - 10<sup>6</sup> scf, for natural gas 10<sup>3</sup> gal for LPG, or ton for waste or sand.
- Fill in appropriate NO<sub>x</sub> Emission Factors [Column C]:
  - For combustion units (EU0010 through EU0260, EU0280, and Space Heaters):
    - If fired with natural gas, factor is 100 lb/10<sup>6</sup> scf [From AP-42 Table 1.4-1].
    - If fired with LPG, factor is 14 lb/10<sup>3</sup> gal [From AP-42 Table 1.5-1].
  - For Incinerator (EU0270):
    - If process, factor is 2.0 lb/ton waste [From AP-42 Table 2.1-12]
    - If combustion fired with natural gas, factor is 100 lb/10<sup>6</sup> scf, same as for combustion units
    - If combustion fired with LPG, factor is 14 lb/10<sup>3</sup> gal, same as for combustion units
- Fill in Overall Control Efficiencies [Column D].
- NO<sub>x</sub> Emissions [Column E] = [Column B] X [Column C] X [1-(Column D/100)] X 0.0005 ton/lb
- Line F = Sum of NO<sub>x</sub> Emissions [Column E]
- Line G = Line I from Attachment B for last month
- Line H = Line F from Attachment B for same month last year
- Line I = Line F + Line G – Line H. **Installation is in compliance if current 12-month running total NO<sub>x</sub> emissions (Line I) is less than 100 tons.**



[illegible]

## ATTACHMENT C2

Method 22 (Outdoor Observation Log)		
Emission Unit		
Observer	Date	
Sky Conditions		
Precipitation		
Wind Direction	Wind Speed	
<p>Sketch process unit: Indicate the position relative to the source and sun; mark the potential emission points and/or the observing emission points.</p> <div style="text-align: center; font-size: 2em; opacity: 0.3; transform: rotate(-15deg); pointer-events: none;">Draft</div>		
Observation Clock Time	Observation Period Duration (minute:second)	Accumulative Emission Time (minute:second)
Begin Observation		
End Observation		

[illegible]

**ATTACHMENT E**  
**Method 9 Opacity Emissions Observations**

Method 9 Opacity Emissions Observations								
Company						Observer		
Location						Observer Certification Date		
Date						Emission Unit		
Time						Control Device		
Hour	Minute	Seconds				Steam Plume (check if applicable)		Comments
		0	15	30	45	Attached	Detached	
	0							
	1							
	2							
	3							
	4							
	5							
	6							
	7							
	8							
	9							
	10							
	11							
	12							
	13							
	14							
	15							
	16							
	17							
	18							
SUMMARY OF AVERAGE OPACITY								
Set Number	Time		Opacity					
	Start	End	Sum	Average				

Readings ranged from \_\_\_\_\_ to \_\_\_\_\_ % opacity.

Was the emission unit in compliance at the time of evaluation? \_\_\_\_\_  
 YES NO Signature of Observer \_\_\_\_\_

**ATTACHMENT F**  
**Compliance Demonstration for Permit Condition (EU0070 AND EU0080)-003**

Natural Gas Fired

Emission Unit #	MHDR (ton/hr)	PM <sub>10</sub> Emission Factor <sup>1</sup> (lb/ton)	PM <sub>10</sub> PTE Rate <sup>2</sup> (ton/yr) <sup>2</sup>	Combined PM <sub>10</sub> PTE Rate (ton/yr)
EU0070	1	0.2	0.88	1.8
EU0080	1	0.2	0.88	

- PM<sub>10</sub> emission factor from 11/29/1995 stack test as reported on 2004 EIQ. The stack test was done when firing natural gas
- For each unit,  $\left(\frac{1\text{ton}}{\text{hr}}\right)\left(\frac{0.2\text{lb}}{\text{ton}}\right)\left(\frac{8760\text{hr}}{\text{yr}}\right)\left(\frac{\text{ton}}{2000\text{lb}}\right) = 0.88 \frac{\text{ton}}{\text{yr}}$

LPG Fired

Emission Unit #	Process MHDR (ton/hr)	Fuel Capacity (10 <sup>3</sup> gal/hr)	Process Emission Factor <sup>1</sup> (lb/ton)	Combustion Emission Factor <sup>2</sup> (lb/10 <sup>3</sup> gal)	PM <sub>10</sub> PTE (ton/yr)	Combined PM <sub>10</sub> PTE Rate (ton/yr)
EU0070	1	0.075	0.2	0.4	1.0	2.0
EU0080	1	0.075	0.2	0.4	1.0	

- PM<sub>10</sub> process emission factor from 11/29/1995 stack test as reported on 2004 EIQ. The stack test was done when firing natural gas. For a worst-case scenario, assume all of the PM<sub>10</sub> emissions during the stack test were due to the process.
- PM<sub>10</sub> combustion emission factor from AP-42 Table 1.5-1 (For natural gas and propane, all particulate matter (PM) is less than 10 microns in diameter (PM<sub>10</sub>))
- For each unit,  $\left[\left(\frac{1\text{ton}}{\text{hr}}\right)\left(\frac{0.2\text{lb}}{\text{ton}}\right) + \left(\frac{0.075 \times 10^3 \text{ gal}}{\text{hr}}\right)\left(\frac{0.4\text{lb}}{10^3 \text{ gal}}\right)\right]\left[\left(\frac{8760\text{hr}}{\text{yr}}\right)\left(\frac{\text{ton}}{2000\text{lb}}\right)\right] = 1.0 \frac{\text{ton}}{\text{yr}}$

Permit Condition (EU0070 and EU0080)-003 limits Melt Furnaces #7 and #8 to a combined total of 15 tons per year (tpy) of PM<sub>10</sub>. Since these two units have the combined potential to emit only 1.8 tpy of PM<sub>10</sub> when fired by natural gas, and only 2.0 tpy when fired by liquefied petroleum gas, they are always in compliance with this permit condition.

**ATTACHMENT F**  
**Compliance Demonstration for Permit Condition (EU0090 and EU0100)-004**

Natural Gas Fired

Emission Unit #	MHDR (ton/hr)	PM <sub>10</sub> Emission Factor <sup>1</sup> (lb/ton)	PM <sub>10</sub> PTE Rate <sup>2</sup> (lb/hr) <sup>2</sup>	Combined PM <sub>10</sub> PTE Rate (ton/yr)
EU0090	1	0.2	0.2	0.4
EU0100	1	0.2	0.2	

- PM<sub>10</sub> emission factor from 11/29/1995 stack test as reported on 2004 EIQ. The stack test was done when firing natural gas.
- For each unit,  $\left(\frac{1 \text{ ton}}{\text{hr}}\right)\left(\frac{0.2 \text{ lb}}{\text{ton}}\right) = 0.2 \frac{\text{lb}}{\text{hr}}$

LPG Fired

Emission Unit #	Process MHDR (ton/hr)	Fuel Capacity (10 <sup>3</sup> gal/hr)	Process Emission Factor <sup>1</sup> (lb/ton)	Combustion Emission Factor <sup>2</sup> (lb/10 <sup>3</sup> gal)	PM <sub>10</sub> PTE (lb/hr)	Combined PM <sub>10</sub> PTE Rate (lb/hr)
EU0090	1	0.075	0.2	0.4	0.23	0.46
EU0100	1	0.075	0.2	0.4	0.23	

- PM<sub>10</sub> process emission factor from 11/29/1995 stack test as reported on 2004 EIQ. The stack test was done when firing natural gas. For a worst-case scenario, assume all of the PM<sub>10</sub> emissions during the stack test were due to the process.
- PM<sub>10</sub> combustion emission factor from AP-42 Table 1.5-1 (For natural gas and propane, all particulate matter (PM) is less than 10 microns in diameter (PM<sub>10</sub>))
- For each unit,  $\left(\frac{1 \text{ ton}}{\text{hr}}\right)\left(\frac{0.2 \text{ lb}}{\text{ton}}\right) + \left(\frac{0.075 \times 10^3 \text{ gal}}{\text{hr}}\right)\left(\frac{0.4 \text{ lb}}{10^3 \text{ gal}}\right) = 0.23 \frac{\text{lb}}{\text{hr}}$

Permit Condition (EU0090 AND EU0100)-004 limits the stacks from Melt Furnaces #9 and #10 to a combined total of 12.37 lb/hr of PM. These two units have the combined potential to emit only 0.4 lb/hr of PM<sub>10</sub> when fired by natural gas, and only 0.46 lb/hr when fired by liquefied petroleum gas. For natural gas and propane, all particulate matter (PM) is less than 10 microns in diameter (PM<sub>10</sub>) Therefore these units are always in compliance with this permit condition.

## ATTACHMENT G

### Incinerator Waste Tacking Record

[illegible]

**To be in compliance, the permittee:**

- 1) **Must not operate the Incinerator (EU0270) more than 8 hours in any day, more than 6 days in any week, or more than 51 weeks in any year, and**
- 2) **Must not burn more than 600 pounds per day of waste material in EU0270.**

**ATTACHMENT H**  
**Compliance Demonstration for Permit Condition EU0280-001**

PM Allowable Emission Rate (E)

$$E = 1.31Q^{-0.338}$$

Where

E = maximum allowable particulate emission rate in pounds per million Btu of heat input, rounded to two decimal places;

Q = the installation's total heat input in millions of Btu/hr

$$\begin{aligned} Q &= Q_{\text{Melt Furnaces}} + Q_{\text{Incinerator}} + Q_{\text{Space Heaters}} + Q_{\text{Core Burnout Oven}} \\ &= 140.97 \text{ MMBtu/hr} + 0.60 \text{ MMBtu/hr} + 41.03 \text{ MMBtu/hr} + 0.60 \text{ MMBtu/hr} \\ &= 183.20 \text{ MMBtu/hr} \end{aligned}$$

$$\begin{aligned} E &= 1.31(183.20)^{-0.338} \\ &= 0.23 \text{ lb/MMBtu} \end{aligned}$$

PM Potential Emission Rate (PTE):

When Burning Natural Gas

PM emission factor for natural gas = 7.6 lb/10<sup>6</sup> scf [AP-42 Table 1.4-2]

Heating value of natural gas = 1020 MMBtu/10<sup>6</sup> scf [AP-42 Table 1.4-2]

$$\text{Potential PM Emissions for natural gas} = \left( \frac{7.6 \text{ lb}}{10^6 \text{ scf}} \right) \left( \frac{10^6 \text{ scf}}{1020 \text{ MMBtu}} \right) = 0.0075 \text{ lb/MMBtu}$$

When Burning Liquid Petroleum Gas (LPG)

PM emission factor for liquid petroleum gas = 0.4 lb/10<sup>3</sup> gal [AP-42 Table 1.5-1]

Heating value of liquid petroleum gas = 91.5 MMBtu/10<sup>3</sup> gal [AP-42 Chapter 1.5]

$$\text{Potential PM Emission for LPG} = \left( \frac{0.4 \text{ lb}}{10^3 \text{ gal}} \right) \left( \frac{10^3 \text{ gal}}{91.5 \text{ MMBtu}} \right) = 0.0044 \text{ lb/MMBtu}$$

Since the PM PTE rate for the Core Burnout Oven (EU0280) is 0.0075 lb/MMBtu when burning natural gas and 0.0044 lb/MMBtu when burning LPG, and since both these amounts are much less than the allowable PM emission rate of 0.23 lb/MMBtu, this unit is in compliance with 10 CSR 10-3.060, *Maximum Allowable Emissions for Particulate Matter From Fuel Burning Used for Indirect Heating* as long as it burns exclusively pipeline grade natural gas, liquefied petroleum gas, or any combination of two fuels.



# STATEMENT OF BASIS

## **Voluntary Limitations**

In order to qualify for this Intermediate State Operating Permit, the permittee has accepted voluntary, federally enforceable emission limitations. Per 10 CSR 10-6.065(5)(C)1.A.(VI), if these limitations are exceeded, the installation immediately becomes subject to 10 CSR 10-6.065(6) and enforcement action for operating without a valid part 70 operating permit. It is the permittee's responsibility to monitor emission levels and apply for a part 70 operating permit far enough in advance to avoid this situation. This may mean applying more than eighteen months in advance of the exceedance, since it can take that long or longer to obtain a part 70 operating permit.

## **Permit Reference Documents**

These documents were relied upon in the preparation of the operating permit. Because they are not incorporated by reference, they are not an official part of the operating permit.

- 1) Intermediate Operating Permit Application, received June 3, 2002;
- 2) 2004 Emissions Inventory Questionnaire, received March 30, 2005;
- 3) U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*; Volume I, Stationary Point and Area Sources, Fifth Edition (AP-42).
- 4) Construction Permit #0187-001, issued January 1987. This permit authorized the construction of an Atlas Incinerator. The facility no longer owns or operates this incinerator. Therefore, the requirements associated with this construction permit are not included in the operating permit.

## **Applicable Requirements Included in the Operating Permit but Not in the Application or Previous Operating Permits**

In the operating permit application, the installation indicated they were not subject to the following regulation(s). However, in the review of the application, the agency has determined that the installation is subject to the following regulation(s) for the reasons stated.

- 1) 10 CSR 10-6.280, *Compliance Monitoring Usage*  
This regulation is included in the operating permit because it is now a core permit requirement.
- 2) 10 CSR 10-6.400, *Restriction of Emission of Particulate Matter from Industrial Processes*  
This regulation is included in the operating permit. It applies to the Spray Paint Booth (EU0290) and the Small Paint Booth (Wood Pattern Shop) (EU0300).

## **Other Air Regulations Determined Not to Apply to the Operating Permit**

The Air Pollution Control Program (APCP) has determined that the following requirements are not applicable to this installation at this time for the reasons stated.

- 1) 10 CSR 10-3.040, *Incinerators*  
The permittee indicated on the permit application that the Incinerator (EU0270) was subject to this regulation. However, it was rescinded December 9, 1991, so it no longer applies.
- 2) 10 CSR 10-6.100, *Alternate Emission Limits*  
This regulation is not applicable because the installation is not in an ozone nonattainment area.

### Construction Permit Revisions

The following revisions were made to construction permits for this installation:

1) Construction Permit #0277-001

This construction permit authorized the construction of the Incinerator (EU0270). It does not contain any recordkeeping or reporting requirements. This operating permit includes recordkeeping requirements for the weight of material burned each day and the times of operation, to demonstrate compliance with the limitations that the construction permit placed on these. According to Permit Review Item No. 5, the opacity and grain loading levels are expected to be significantly below the emission limitations; therefore no opacity-, grain loading-, or other particulate matter-related permit conditions are included in this operating permit for this unit.

2) Construction Permit #0187-001

This permit authorized the construction of an Atlas incinerator. The facility no longer owns or operates this incinerator. Therefore, the requirements associated with this construction permit are not included in the operating permit.

3) Construction Permit #1190-008

This construction permit authorized the construction of four of the melt furnaces.

a) This construction permit indicates that 10 CSR 10-3.050, *Restriction of Emission of Particulate Matter From Industrial Processes*, is applicable. This regulation was rescinded on March 30, 2001, and replaced by 10 CSR 10-6.400. The three Stahl model 4500 DDR stretch and one Stahl model 3000 DDR aluminum melting and holding furnaces authorized by this permit have the uncontrolled potential to emit less than 0.5 lb of particulate matter, and are therefore exempt from the regulation, per 10 CSR 10-6.400(1)(B)11.

b) This construction permit indicates that 10 CSR 10-3.060, *Maximum Allowable Emissions of Particulate Matter From Fuel Burning Equipment Used for Indirect Heating* is applicable. This regulation applies to indirect heating sources. The permittee indicated on the permit application that the melt furnaces are direct heating sources, so it does not apply to them.

4) Construction Permit #0493-013

This construction permit authorized the construction of two of the melt furnaces.

a) This construction permit indicates that 10 CSR 10-3.060, *Maximum Allowable Emissions of Particulate Matter From Fuel Burning Equipment Used for Indirect Heating*, is applicable. This regulation applies to indirect heating sources. The permittee indicated on the permit application that the melt furnaces are direct heating sources, so it does not apply.

b) This construction permit indicates that 10 CSR 10-3.080, *Restriction of Emission of Visible Air Contaminants*, is applicable. This regulation was rescinded on May 30, 2000, and replaced by 10 CSR 10-6.220. The new regulation is included in this operating permit.

c) This construction permit indicates that 10 CSR 10-3.100, *Restriction of Emission of Sulfur Compounds*, is applicable. This regulation was rescinded on July 30, 1997, and replaced by 10 CSR 10-6.260. The Melt Furnaces (EU0010 through EU00260), Incinerator (EU0270), and Core Burnout Ovens (EU0280) use exclusively pipeline grade natural gas or liquefied petroleum gas. Per 10 CSR 10-6.260(1)(A)2, this exempts them from the regulation. This exemption is not in the State Implementation Plan (SIP) yet. However, as long as an emission unit burns exclusively pipeline grade natural gas or liquefied petroleum gas (LPG) or any combination of these fuels, its emission rate for sulfur compounds will be in compliance with the SIP limitations. Therefore this regulation is included as a permit condition for these units, but only for the purpose of restricting these emission units to these fuels.

5) Construction Permit #0894-019

This construction permit indicates that 10 CSR 10-3.080, *Restriction of Emission of Visible Air Contaminants*, is applicable. This regulation was rescinded and replaced by 10 CSR 10-6.220. The new regulation is included in this operating permit.

6) Construction Permit #0195-012

- a) This construction permit authorized the construction of Melt Furnaces #7 and #8 (EU0070 and EU0080). It limited emission of particulate matter less than ten microns in diameter ( $PM_{10}$ ) from the aluminum and holding furnaces to no more than 15 tons in any 12-month period. The wording was changed in Permit Condition (EU0070 AND EU0080)-003 to “the permittee shall emit no more than 15 tons of particulate matter less than ten microns ( $PM_{10}$ ) from *Melt Furnaces #7 and #8 (EU0070 and EU0080)* in any *consecutive* 12-month period. This construction permit also established recordkeeping and reporting requirements to demonstrate compliance with the emission limitation. On 11/29/1995, the permittee performed a stack test to measure PM emissions from the melt furnaces (EU0010 through EU0260). The results, included in Attachment F, demonstrate that EU0070 and EU0080 are always in compliance with the emission limit. Therefore, further recordkeeping and reporting requirements are not required and are not included in the operating permit.
- b) This construction permit indicates that 10 CSR 10-3.080, *Restriction of Emission of Visible Air Contaminants*, and 10 CSR 10-3.050, *Restriction of Emission of Particulate Matter From Industrial Processes*, are applicable. These regulations were rescinded and replaced by 10 CSR 10-6.220 and 10 CSR 10-6.400, respectively. 10 CSR 10-6.220 is included in the operating permit. 10 CSR 10-6.400 is not. The melt furnaces have the uncontrolled potential to emit less than 0.5 lb/hr of particulate matter, and are therefore exempt from the latter regulation, per 10 CSR 10-6.400(1)(B)11.

7) Construction Permits #0695-002, #0296-011, and #0296-011A

- a) Construction Permit #0695-002 established a facility-wide emission limit of 80 tons of  $PM_{10}$  in any consecutive 12-month period. Construction Permit #0296-011 increased this limit from 80 tons to 95 tons. Construction Permit #0296-011 was then amended (Construction Permit #0296-011A) to remove the special conditions establishing a plant-wide  $PM_{10}$  emission limit. Therefore no facility-wide  $PM_{10}$  emission limit is included in the operating permit.
- b) These construction permit indicate that 10 CSR 10-3.080, *Restriction of Emission of Visible Air Contaminants*, and 10 CSR 10-3.050, *Restriction of Emission of Particulate Matter From Industrial Processes*, are applicable. These regulations were rescinded and replaced by 10 CSR 10-6.220 and 10 CSR 10-6.400, respectively. 10 CSR 10-6.220 is included in the operating permit. 10 CSR 10-6.400 is not. The melt furnaces have the uncontrolled potential to emit less than 0.5 lb/hr of particulate matter, and are therefore exempt from the latter regulation, per 10 CSR 10-6.400(1)(B)11.

8) Construction Permit #042002-010

- a) This construction permit indicates that 10 CSR 10-6.400, *Restriction of Emission of Particulate Matter From Industrial Processes*, is applicable. The melt furnaces have the uncontrolled potential to emit less than 0.5 lb/hr of particulate matter, and are therefore exempt from this regulation, per 10 CSR 10-6.400(1)(B)11.
- b) This construction permit indicates that 10 CSR 10-6.260 is applicable. 10 CSR 10-6.260 does not apply to the melt furnaces because according to 10 CSR 10-6.260(1)(A)2., combustion equipment that uses exclusively pipeline grade natural gas or liquefied petroleum gas or any combination of these fuels are exempt. The regulation is included as a permit condition, but only for the purpose of restricting these emission units to these fuels.

### **New Source Performance Standards (NSPS) Applicability**

1) 40 CFR Part 60 Subpart E, *Standards of Performance for Incinerators*

This subpart only applies to incinerators of more than 45 metric tons per day charging rate (50 tons/day). The Incinerator (EU0270) is limited to 600 pounds per day, so it is not subject to this subpart.

2) 40 CFR Part 60 Subpart S, *Standard of Performance for Primary Aluminum Reduction Plants*

This installation is not subject to this subpart, because it is not a primary aluminum reduction plant as defined in 40 CFR 60.191.

No other NSPS regulations (40 CFR Part 60) apply to this installation.

### **Maximum Available Control Technology (MACT) Applicability**

The facility does not emit any single hazardous air pollutant (HAP) in an amount greater than 10 tons per year nor does the facility emit any combination of HAPs in an amount greater than 25 tons per year. Therefore, no MACT regulations (40 CFR Part 63) apply to this facility.

### **National Emission Standards for Hazardous Air Pollutants (NESHAP) Applicability**

In the permit application and according to APCP records, there was no indication that any Missouri Air Conservation Law, *Asbestos Abatement*, 643.225 through 643.250; 10 CSR 10-6.080, *Emission Standards for Hazardous Air Pollutants*, Subpart M, *National Standards for Asbestos*; and 10 CSR 10-6.250, *Asbestos Abatement Projects - Certification, Accreditation, and Business Exemption Requirements* apply to this installation. The installation is subject to these regulations if they undertake any projects that deal with or involve any asbestos containing materials. None of the installation's operating projects underway at the time of this review deal with or involve asbestos containing material. Therefore, the above regulations were not cited in the operating permit. If the installation should undertake any construction or demolition projects in the future that deal with or involve any asbestos containing materials, the installation must follow all of the applicable requirements of the above rules related to that specific project.

No other NESHAP regulations apply to this installation.

### **Other Regulatory Determinations**

1) 10 CSR 10-6.220, *Restriction of Emission of Visible Air Contaminants*

The rule does not apply to the Incinerator (EU0270). Per 10 CSR 10-6.220(1)(J), incinerators used to burn refuse in the outstate area of Missouri are exempt.

2) 10 CSR 10-6.260, *Restriction of Emission of Sulfur Compounds*

- a) According to 10 CSR 10-6.260(1)(A)2, this rule does not apply to combustion sources that use exclusively pipeline grade natural gas or liquefied petroleum gas or any combination of these fuels. The rule has been included as a permit condition for the facility's combustion sources, but only for the purpose of restricting these emission units to these fuels.

- b) The Sand Core Curing Process (EU0310) uses SO<sub>2</sub> as a catalyst to cure the sand cores, emits SO<sub>2</sub> and therefore is subject to this rule. The curing process is controlled by wet scrubbers and exhausts inside the facility building. The facility uses a continuous monitoring system to keep the emissions within the National Institute for Occupational Safety and Health (NIOSH) Short Term Limit (STEL) for SO<sub>2</sub>, which is 5 ppmv. Since this NIOSH SO<sub>2</sub> limit of 5 ppmv is much less than the 10 CSR 10-6.260 limit for existing sources of 2000 ppmv, the facility will always be in compliance with this rule as long as the control device and continuous monitoring system are in operation and working properly.

3) 10 CSR 10-6.400, *Restriction of Emission of Particulate Matter from Industrial Processes*

- a) The Melt Furnaces (EU0010 through EU0260) are exempt from this rule. Per 10 CSR 10-6.400(1)(B)11, emission units that at maximum design capacity have a potential to emit less than one-half (0.5) pounds per hour of particulate matter are exempt. The calculations below verify that these emission units have a potential to emit less than 0.5 lb/hr of particulate matter.

PM Emission Rate with Natural Gas

Emission Unit #	Description	MHDR (ton/hr)	PM Emission Factor <sup>1</sup> (lb/ton)	PM Emission Rate (lb/hr)
EU0010	Melting Furnace #1	0.75	0.2	0.15
EU0020	Melting Furnace #2	0.75	0.2	0.15
EU0030	Melting Furnace #3	0.75	0.2	0.15
EU0040	Melting Furnace #4	0.75	0.2	0.15
EU0050	Melting Furnace #5	0.75	0.2	0.15
EU0060	Melting Furnace #6	0.75	0.2	0.15
EU0070	Melting Furnace #7	1	0.2	0.2
EU0080	Melting Furnace #8	1	0.2	0.2
EU0090	Melting Furnace #9	1	0.2	0.2
EU0100	Melting Furnace #10	1	0.2	0.2
EU0110	Melting Furnace #11	1	0.2	0.2
EU0120	Melting Furnace #12	1	0.2	0.2
EU0130	Melting Furnace #13	1	0.2	0.2
EU0140	Melting Furnace #14	1.65	0.2	0.33
EU0150	Melting Furnace #21	0.5	0.2	0.1
EU0160	Melting Furnace #22	0.5	0.2	0.1
EU0170	Melting Furnace #23	0.5	0.2	0.1
EU0180	Melting Furnace #24	0.5	0.2	0.1
EU0190	Melting Furnace #25	0.25	0.2	0.05
EU0200	Melting Furnace #26	0.5	0.2	0.1
EU0210	Melting Furnace #27	0.47	0.2	0.09
EU0220	Melting Furnace #28	0.21	0.2	0.04
EU0230	Melting Furnace #29	0.75	0.2	0.15
EU0240	Melting Furnace #30	0.75	0.2	0.15
EU0250	Melting Furnace #31	0.75	0.2	0.15
EU0260	Melting Furnace #32	0.75	0.2	0.15

1. Process PM Emission Factor (0.2 lb/ton) from 11/29/1995 stack test as reported on 2004 EIQ

PM Emission Rate with Liquid Petroleum Gas (LPG)

[A] Unit	[B] Description	[C] Process MHDR (ton/hr)	[D] Process PM Emission Factor <sup>1</sup> (lb/ton)	[E] Maximum Fuel capacity (10 <sup>3</sup> gal/hr)	[F] Combustion PM Emission Factor <sup>2</sup> (lb/10 <sup>3</sup> gal)	[G] PM Emission Rate <sup>3</sup> (lb/hr)
EU0010	Melting Furnace #1	0.75	0.2	0.071	0.4	0.18
EU0020	Melting Furnace #2	0.75	0.2	0.071	0.4	0.18
EU0030	Melting Furnace #3	0.75	0.2	0.071	0.4	0.18
EU0040	Melting Furnace #4	0.75	0.2	0.071	0.4	0.18
EU0050	Melting Furnace #5	0.75	0.2	0.071	0.4	0.18
EU0060	Melting Furnace #6	0.75	0.2	0.071	0.4	0.18
EU0070	Melting Furnace #7	1	0.2	0.075	0.4	0.23
EU0080	Melting Furnace #8	1	0.2	0.075	0.4	0.23
EU0090	Melting Furnace #9	1	0.2	0.075	0.4	0.23
EU0100	Melting Furnace #10	1	0.2	0.075	0.4	0.23
EU0110	Melting Furnace #11	1	0.2	0.075	0.4	0.23
EU0120	Melting Furnace #12	1	0.2	0.075	0.4	0.23
EU0130	Melting Furnace #13	1	0.2	0.075	0.4	0.23
EU0140	Melting Furnace #14	1.65	0.2	0.14	0.4	0.39
EU0150	Melting Furnace #21	0.5	0.2	0.034	0.4	0.11
EU0160	Melting Furnace #22	0.5	0.2	0.034	0.4	0.11
EU0170	Melting Furnace #23	0.5	0.2	0.038	0.4	0.12
EU0180	Melting Furnace #24	0.5	0.2	0.034	0.4	0.11
EU0190	Melting Furnace #25	0.25	0.2	0.018	0.4	0.06
EU0200	Melting Furnace #26	0.5	0.2	0.038	0.4	0.12
EU0210	Melting Furnace #27	0.47	0.2	0.038	0.4	0.11
EU0220	Melting Furnace #28	0.21	0.2	0.015	0.4	0.05
EU0230	Melting Furnace #29	0.75	0.2	0.055	0.4	0.17
EU0240	Melting Furnace #30	0.75	0.2	0.055	0.4	0.17
EU0250	Melting Furnace #31	0.75	0.2	0.053	0.4	0.17
EU0260	Melting Furnace #32	0.75	0.2	0.055	0.4	0.17

1. Process PM Emission Factor (0.2 lb/ton) from 11/29/1995 stack test as reported on 2004 EIQ

2. Combustion PM Emission Factor (0.4 lb/ton) from AP-42 Table 1.5-1

3.  $[G] = ([C] \times [D]) + ([E] \times [F])$

- b) The Incinerator (EU0270) is not subject to this rule. Per 10 CSR 10-6.400(1)(B)9, the burning of refuse is exempt.
- c) Per 10 CSR 10-6.400(1)(B)11, emission units that at maximum design capacity have a potential to emit less than 0.5 pound per hour of particulate matter are exempt from this regulation. The calculations below demonstrate that the Paint Spray Booth (EU0290) and the Small Paint Booth (EU0300) each emit much less than this (0.07 lb/hr each), provided the required control devices are in operation and working properly. Therefore this regulation is included in this permit for these units, but their emission limits are 0.5 lb/hr each, and the only

monitoring/recordkeeping/reporting requirements relate to the control devices. As long as these are maintained and operated correctly, these units will remain under the 0.5 lb/hr limit, and will not be subject to the more onerous requirements of the rest of this regulation.

[A] Unit	[B] MHDR (gal/hr)	[C] Density <sup>1</sup> (lb/gal)	[D] Process Weight Rate <sup>2</sup> (ton/hr)	[E] Solids (%)	[F] PM Content <sup>3</sup> (lb/ton)	[G] Transfer Rate (%)	[H] Overall Control Eff. (%)	[I] Uncontrolled PM Emission Rate <sup>4</sup> (lb/hr)	[J] Controlled PM Emission Rate (lb/hr)
EU0290	1.0	9.90	0.0050	34	680	65	94	1.19	0.07
EU0300	1.0	9.90	0.0050	34	680	65	94	1.19	0.07

1. Product information (density, % solids) given are for Sherwin Williams Polane T polyurethane enamel
2.  $[D] = [B] \times [C] \times \text{ton}/2000 \text{ lb}$
3.  $[F] = ([E] / 100) \times 2000 \text{ lb/ton}$  This is the amount of PM (solids) in the coating.
4.  $[I] = [D] \times [F] \times (1 - ([G] / 100))$  This is the amount of PM that does not stick to the painted item.
5.  $[J] = [I] \times (1 - ([H] / 100))$  This is the amount of PM that didn't stick that gets through the filter.

#### Other Regulations Not Cited in the Operating Permit or the Above Statement of Basis

Any regulation which is not specifically listed in either the Operating Permit or in the above Statement of Basis does not appear, based on this review, to be an applicable requirement for this installation for one or more of the following reasons.

- 1) The specific pollutant regulated by that rule is not emitted by the installation.
- 2) The installation is not in the source category regulated by that rule.
- 3) The installation is not in the county or specific area that is regulated under the authority of that rule.
- 4) The installation does not contain the type of emission unit which is regulated by that rule.
- 5) The rule is only for administrative purposes.

Should a later determination conclude that the installation is subject to one or more of the regulations cited in this Statement of Basis or other regulations which were not cited, the installation shall determine and demonstrate, to the Air Pollution Control Program's satisfaction, the installation's compliance with that regulation(s). If the installation is not in compliance with a regulation which was not previously cited, the installation shall submit to the APCP a schedule for achieving compliance for that regulation(s).

Prepared by:

---

Cheryl Steffan  
Environmental Engineer

Mr. Franz Eckl, President  
ThyssenKrupp Stahl company – Kingsville Plant  
111 E. Pacific  
Kingsville, MO 64061

Re: ThyssenKrupp Stahl Company – Kingsville Plant, 101-0003  
Permit Number:

Dear Mr. Eckl:

Enclosed with this letter is your intermediate operating permit. Please review this document carefully. Operation of your installation in accordance with the rules and regulations cited in this document is necessary for continued compliance. It is very important that you read and understand the requirements contained in your permit.

If you have any questions or need additional information regarding this permit, please contact the Air Pollution Control Program (APCP) at (573) 751-4817, or you may write to the Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Michael J. Stansfield, P.E.  
Operating Permit Unit Chief

MJS:csk

Enclosures

c: Ms. Tamara Freeman, US EPA Region VII  
Mr. Richard Vani, Kansas City Regional Office  
PAMS File: 2002-06-013



CERTIFIED MAIL, 70041160000081717272  
RETURN RECEIPT REQUESTED

Mr. Stephan B. Williams  
Safety & Environmental Specialist  
ThyssenKrupp Stahl Company – Kingsville Plant  
111 E. Pacific  
Kingsville, MO 64061

Re: Draft Intermediate Operating Permit – Project (PAMS): 2002-06-013

Dear Mr. Williams:

The Air Pollution Control Program (APCP) has completed the preliminary review of your Intermediate (Title V) permit application. A public notice will be placed in The Holden Image on Thursday, July 13, 2006.

The APCP will accept comments regarding the draft permit that are postmarked on or before the closing date. It is very important that you read and understand this legal document. You will be held responsible for complying with this document.

Please address comments or recommendations for changes to my attention at:

Operating Permits Unit  
Air Pollution Control Program  
P.O. Box 176  
Jefferson City, MO 65102

A copy of this draft is also being sent to the U.S. EPA's Region VII office in Kansas City for their review. The Region VII office is afforded, by law, oversight authority on any Title V permit which Missouri (or any of the other states in the region) may propose to issue. A public hearing may be held if interest is expressed by the public.

Mr. Stephan B. Williams  
Page Two

Should you have any questions, or wish clarification on any items in this draft permit, please feel free to contact me at (573) 751-4817, or you may write to the Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Cheryl Steffan  
Environmental Engineer

CAS/kdm

Enclosures

c: Ms. Tamara Freeman, US EPA Region VII  
Mr. Richard Vani, Kansas City Regional Office  
PAMS File: 2002-06-013

Mr. Jan Sides, Director  
Kansas Bureau of Air & Radiation  
Forbes Field, Building 283  
Topeka, KS 66620

RE: Affected States Review – Notification of Proposed Final Intermediate Operating Permit

Dear Mr. Sides:

In accordance with Missouri State Rule 10 CSR 10-6.065(5)(F)1. and the Clean Air Act this letter is to notify you of public notice of the preliminary draft and request for comments for:

ThyssenKrupp Stahl Company – Kingsville Plant located in Kingsville, MO 64061

Project Number – 2002-06-013

Public notice will be published in The Holden Image on Thursday, July 13, 2006.

You are invited to submit any relevant information, materials, and views in support of or in opposition to the draft operating permits in writing by no later than August 12, 2006 to my attention at Missouri Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102.

Should you require further information or documentation on this matter, please contact the Operating Permits Unit at (573) 751-4817, or you may write to the Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102. Thank you for your time and attention.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Michael J. Stansfield, P.E.  
Operating Permit Unit Chief

MJS:csk

c: Kansas City Regional Office  
PAMS File: 2002-06-013

For Publication on Thursday, July 13, 2006

Notice of documents available for public viewing  
Department of Natural Resources  
Air and Land Protection Division  
Air Pollution Control Program

A draft-operating permit has been issued for the following air pollution sources:

Installation	City	Project #
ThyssenKrupp Stahl Company – Kingsville Plant	Kingsville	2002-06-013

Activities included in these permits are all activities involved in the operation of these sources with the potential for producing regulated quantities of regulated air pollutants.

Copies of the draft permits are available for public comment. Public files containing copies of all non-confidential materials and a copy or summary of other materials, if any, considered in this draft permit, are available for public viewing at the following locations: MO Dept. of Natural Resources, Kansas City Regional Office, 500 NE Colbern Road, Lee's Summit, MO 64086-4710 or by written request from the Air Pollution Control Program, Operating Permits Unit, P.O. Box 176, Jefferson City, MO 65102 (Any information deemed confidential business information pursuant to Missouri State Rule 10 CSR 10-6.210, *Confidential Information*, if any exists, are not included in the public files. Emission data, as defined by this rule, cannot be considered confidential business information.)

The file is available for viewing through August 12, 2006. Citizens are invited to submit any relevant information, materials, and views in support of or in opposition to the draft operating permits in writing no later than August 12, 2006. Written comments and/or requests for public hearing should be sent to Mr. Jim Kavanaugh, Missouri Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102.

The Air Pollution Control Program will hold an informal public hearing after an additional 30 day comment period on the draft permit if: 1.) A timely request is made for such a hearing during the public comment period; and 2.) The person requesting the hearing identifies material issues concerning the preliminary determination and the Air Pollution Control Program determines that a public hearing will be useful in resolving those issues.

This public notice is made pursuant to Missouri State Rule 10 CSR 10-6.065, Operating Permits.

The Holden Image  
117 East Second Street  
PO Box 8  
Holden, MO 64040

Attention: Legal Ads

To Whom It May Concern:

We wish to place the attached legal advertisement in your newspaper to be run ONCE. It must run on Thursday, July 13, 2006.

We require a certified affidavit of publication. This must be received in our office by July 27, 2006. Please submit the affidavit and invoice for payment to:

Attention: Cheri Bechtel  
Department of Natural Resources  
Air Pollution Control Program  
P. O. Box 176  
Jefferson City, MO 65102

If you have any questions, please contact me at (573) 751-4817. Thank you for your assistance.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Michael J. Stansfield, P.E.  
Operating Permits Unit Chief

MJS/csk

c: Cheri Bechtel, Procurement Clerk  
PAMS File: 2002-06-013

MISSOURI DEPARTMENT OF NATURAL RESOURCES FOLDER TRANSMITTAL ROUTING SHEET		Document #: Division Log #: Program Log #:
DEADLINE: Date		Penalty for Missing Deadline: None
ThyssenKrupp Stahl Company – Kingsville Plant		2002-06-013
Originator: Cheryl Steffan		Telephone: (573) 751-4817
		Date:
Typist:: Karla Marshall		File Name: P:\APCP\Permits\Users\Operating Permits\Permits on Public Notice\Permits on Public Notice 2006\2002-06-013 Stahl Specialty Co.doc
FOR SIGNATURE APPROVAL OF:		
<input type="checkbox"/> DNR Director <input type="checkbox"/> DNR Deputy Director <input type="checkbox"/> Division Director <input type="checkbox"/> Division Deputy Director    X Other: Jim Kavanaugh		
PROGRAM APPROVAL: Approved by: _____ Program: APCP Date: _____		
Other Program Approval (Section/Unit): _____ Date: _____		
Comments:		
ROUTE TO:		
<input type="checkbox"/> DIVISION DIRECTOR APPROVAL: _____		Date: _____
Comments:		
<input type="checkbox"/> FINANCIAL REVIEW – DIVISION OF ADMINISTRATIVE SUPPORT:		
DAS Director: _____		Date: _____
<input type="checkbox"/> Fee Worksheet Received By: _____		Date: _____
Accounting: _____		Date: _____
Budget: _____		Date: _____
General Services: _____		Date: _____
Internal Audit: _____		Date: _____
Purchasing: _____		Date: _____
Comments:		
<input type="checkbox"/> LEGAL REVIEW:		
<input type="checkbox"/> General Counsel: _____		Date: _____
<input type="checkbox"/> AGO: _____		Date: _____
Comments:		
<input type="checkbox"/> DEPARTMENT DIRECTOR APPROVAL: _____		Date: _____
Comments:		
<input type="checkbox"/> NOTARIZATION NEEDED		
		INITIALS/DATE